

PORTS AND SHIPPING ORGANIZATION
THE ISLAMIC REPUBLIC OF IRAN

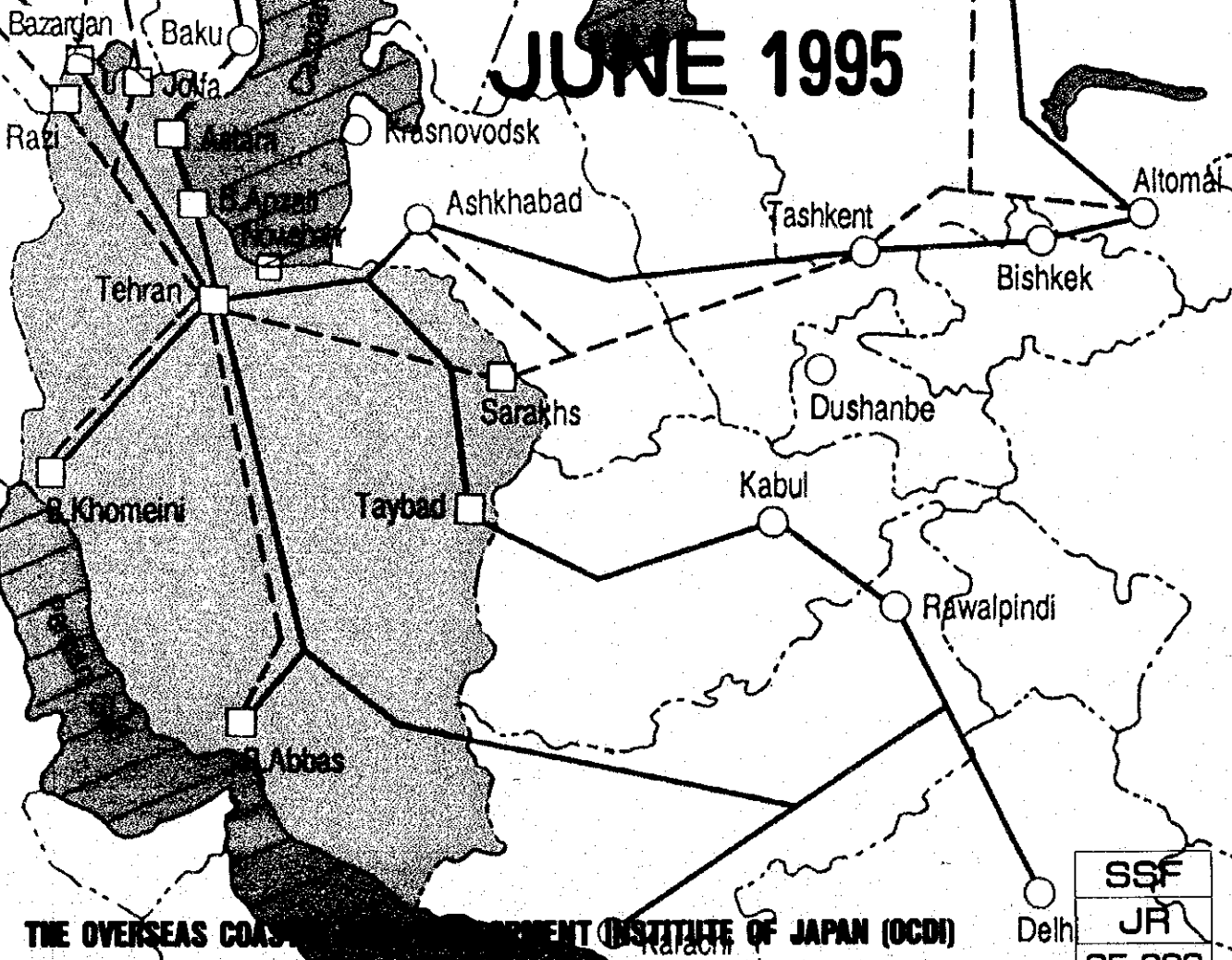
FINAL REPORT

THE PORT SECTOR STUDY OF THE ISLAMIC REPUBLIC OF IRAN VOLUME (V)

APPENDICES

JUNE 1995

FINAL REPORT THE PORT SECTOR STUDY OF THE ISLAMIC REPUBLIC OF IRAN VOLUME (V) JUNE 1995



THE OVERSEAS COAST GUARD DEPARTMENT (INSTITUTE OF JAPAN (OCDI))
PACIFIC CONSULTANTS

| |
|--------|
| SSF |
| JR |
| 95-093 |

304
72.8
SSF
LIBRARY
A.

The following foreign exchange rate is applied in this study:
US\$1.00 = 2,000 Iranian Rials (as January 1994)

JICA LIBRARY



1122452 [4]

28455

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
PORTS AND SHIPPING ORGANIZATION
THE ISLAMIC REPUBLIC OF IRAN**

FINAL REPORT

**THE PORT SECTOR STUDY
OF THE ISLAMIC REPUBLIC**

OF IRAN

VOLUME (V)

APPENDICES

JUNE 1995



THE PORT SECTOR STUDY OF THE ISLAMIC REPUBLIC OF IRAN

VOLUME(V)

APPENDIXES

Table of Contents

LIST OF ABBREVIATIONS

Appendixes Vol.(II) Details of Data for Nationwide Port Development and Management Strategy

| | | |
|-----------------|---|-----|
| Appendix (II)-1 | Back Ground Data | 1 |
| Appendix (II)-2 | Trade Frame and Cargo Handling Data | 12 |
| Appendix (II)-3 | Screening Sheet of Ports | 40 |
| Appendix (II)-4 | Macro Forecast | 47 |
| Appendix (II)-5 | Micro Forecast | 61 |
| Appendix (II)-6 | Port Capacity and Improvement | 115 |

Appendixes Vol.(III) Details of Data for Master Plan and Feasibility Study for the Port of Imam Khomeini

| | | |
|------------------|--|-----|
| Appendix (III)-1 | Planning Works | 117 |
| Appendix (III)-2 | Survey Data | 151 |
| Appendix (III)-3 | Cost Estimation | 191 |
| Appendix (III)-4 | Construction Arrangement | 249 |
| Appendix (III)-5 | Siltatin, Dredging and Reclamation | 267 |
| Appendix (III)-6 | Plans and Drawings | 295 |
| Appendix (III)-7 | Financial Analysis | 317 |
| Appendix (III)-8 | Scoping Sheet of Ports | 323 |

Appendixes Vol.(IV) Details of Data for Master Plan and Feasibility Study for the Port of Anzali

| | | |
|-----------------|---|-----|
| Appendix (IV)-1 | Wind Data - Direction, Speed, Percent | 331 |
| Appendix (IV)-2 | Sub-Soil Boring Result (by JICA) | 339 |
| Appendix (IV)-3 | Sub-Soil Boring Result (by PSO) | 345 |
| Appendix (IV)-4 | Stability against Liquefaction | 359 |
| Appendix (IV)-5 | Types of Marine Facilities | 379 |
| Appendix (IV)-6 | Financial Analysis | 397 |

List of Abbreviations

| | | |
|-------|---|--|
| CIS | : | Commonwealth of Independent States |
| EIRR | : | Economic Internal Rate Return |
| EIA | : | Environmental Impact Assessment |
| PSO | : | Ports and Shipping Organization |
| IIRR | : | Islamic Iranian Republic Railways |
| DCDR | : | Deputy for Construction and Development of Railway Network |
| METRA | : | Railway Developing Consulting Engineers IRAN |
| DOE | : | Department of the Environment |
| STD | : | Short Term Development |
| LTD | : | Long Term Development |
| CIF | : | Cost, Insurance, and Freight |
| FOB | : | Free on Board |
| SCF | : | Standard Conversion Factor |
| CFC | : | Conversion Factor for Consumption |
| PES | : | Preliminary Environmental Survey |
| IEE | : | Initial Environmental Examination |
| FIRR | : | Financial Internal Rate of Return |
| DWT | : | Dead Weight Tonnage |
| MRT | : | Ministry of Roads and Transportation |
| PBO | : | Planning and Budget Organization |
| G.T. | : | Gross Tons |

SYMBOLS

| | |
|----------------------------|-----|
| Negligible fraction | - |
| Figures not available | ? |
| Statistic data unavailable | *** |

APPENDIXES

Vol. (II)

Details of Data for Nationwide Port
Development and Management Strategy

THE UNIVERSITY OF CHICAGO

PH.D. THESIS

IN THE FIELD OF

Appendix (II)-1 Back Ground Data

Appendix II-1.1 Trade frame of CIS countries

| | * TRADE IN REGION TO GNP % | ** INTER TRADE RATIO % | *** GNP SHARE OF USSR % | *** VALUE EXPORT Bn. RUBLE | *** VALUE IMPORT Bn. RUBLE | *** REGION TRADE TO GDP% | *** INTER REGION TRADE % | GDP Bn. RUBLE |
|--------------|----------------------------------|------------------------------|-------------------------------|----------------------------------|----------------------------------|--------------------------------|--------------------------------|------------------|
| UZBEKISTAN | 25.5 | 89.4 | 3.2 | 1.13 | 2.31 | 39.5 | 85.8 | 7.5 |
| TURKMENISTAN | 33.0 | 92.5 | 0.7 | 0.17 | 0.70 | 39.3 | 89.1 | 2.0 |
| TAJKISTAN | 31.0 | 86.5 | 0.8 | 0.49 | 0.80 | 41.6 | 86.3 | 2.7 |
| KYRGYZSTAN | 27.7 | 85.7 | 0.8 | 0.08 | 0.98 | 45.2 | 86.9 | 2.0 |
| KAZAKHSTAN | 20.8 | 88.7 | 4.6 | 1.35 | 2.88 | 33.9 | 86.3 | 10.8 |
| AZERBAIJAN | 29.8 | 87.7 | 1.5 | 0.56 | 1.41 | 42.0 | 85.6 | 4.0 |
| ARMENIA | 25.6 | 90.1 | 1.0 | 0.12 | 1.38 | 54.9 | 89.1 | 2.4 |
| GEORGIA | 24.8 | 85.9 | 1.5 | 0.37 | 2.57 | 44.3 | 86.5 | 5.7 |
| TOTAL | | | 14.1 | 4.27 | 13.03 | (1988) | (1988) | |
| 5 COUNTRIES | | | 10.1 | 3.22 | 7.67 | | | |
| 3 COUNTRIES | | | 4.0 | 1.05 | 5.36 | | | |
| SOVIET TOTAL | | | | 796.7 | 721.1 | | | |

* REGIONAL TRADE DEPENDENCE IN GNP OF FORMER SOVIET UNION
(EXPORT IN REGION + IMPORT IN REGION)/2/GNP

** REGIONAL TRADE DEPENDENCE IN TOTAL TRADE OF FORMER SOVIET UNION
(EXPORT & IMPORT IN REGION)/(TOTAL TRADE)

* ** SOURCE: WORLD ECONOMIC REPORT (JAPANESE ECONOMIC PLANNING AGENCY)

*** SOURCE: "TRADE OF JAPAN TO WORLD 1992" JETRO

Appendix II-1.2 Total imports and exports value of Eastern Europe

(unit; Mn.\$)

| TOTAL | USSR | BULGARIA | CZECHO SLOVAKIA | HUNGARY | POLAND | ROMANIA |
|--------|---------|----------|--------------------|---------|--------|---------|
| 1980 | 144,971 | 20,022 | 30,039 | 17,912 | 35,720 | 24,602 |
| 1981 | 151,963 | 21,490 | 29,534 | 16,999 | 26,551 | 22,158 |
| 1982 | 164,664 | 22,955 | 30,994 | 16,291 | 21,416 | 18,446 |
| 1983 | 171,755 | 24,413 | 32,801 | 15,498 | 22,162 | 23,200 |
| 1984 | 172,332 | 25,564 | 34,231 | 15,166 | 22,388 | 18,300 |
| 1985 | 170,421 | 27,004 | 22,662 | 16,173 | 22,325 | 19,911 |
| 1986 | 186,118 | 29,441 | 26,585 | 18,167 | 23,282 | 23,133 |
| 1987 | 204,027 | 32,116 | 29,606 | 18,654 | 23,049 | 0 |
| 1988 | 217,788 | 33,805 | 29,487 | 18,874 | 26,196 | 0 |
| 1989 | 223,740 | 30,895 | 28,717 | 18,387 | 23,240 | 0 |
| IMPORT | USSR | BULGARIA | CZECHO | HUNGARY | POLAND | ROMANIA |
| 1980 | 68,522 | 9,650 | 15,148 | 9,235 | 18,876 | 13,201 |
| 1981 | 72,960 | 10,801 | 14,658 | 8,718 | 12,043 | 10,978 |
| 1982 | 77,752 | 11,527 | 15,397 | 8,142 | 10,244 | 8,323 |
| 1983 | 80,412 | 12,283 | 16,324 | 7,632 | 10,590 | 9,959 |
| 1984 | 80,680 | 12,714 | 17,078 | 7,326 | 10,638 | 7,565 |
| 1985 | 83,140 | 13,656 | 11,152 | 7,919 | 10,836 | 8,678 |
| 1986 | 88,871 | 15,249 | 13,358 | 9,292 | 11,208 | 10,590 |
| 1987 | 96,061 | 16,211 | 14,883 | 9,450 | 10,844 | |
| 1988 | 107,229 | 16,582 | 14,593 | 9,135 | 12,240 | |
| 1989 | 114,567 | 14,881 | 14,277 | 8,803 | 10,085 | |
| EXPORT | USSR | BULGARIA | CZECHO | HUNGARY | POLAND | ROMANIA |
| 1980 | 76,449 | 10,372 | 14,891 | 8,677 | 16,844 | 11,401 |
| 1981 | 79,003 | 10,689 | 14,876 | 8,281 | 14,508 | 11,180 |
| 1982 | 86,912 | 11,428 | 15,597 | 8,149 | 11,172 | 10,123 |
| 1983 | 91,343 | 12,130 | 16,477 | 7,866 | 11,572 | 13,241 |
| 1984 | 91,652 | 12,850 | 17,153 | 7,840 | 11,750 | 10,735 |
| 1985 | 87,281 | 13,348 | 11,510 | 8,254 | 11,489 | 11,233 |
| 1986 | 97,247 | 14,192 | 13,227 | 8,875 | 12,074 | 12,543 |
| 1987 | 107,966 | 15,905 | 14,723 | 9,204 | 12,205 | |
| 1988 | 110,559 | 17,223 | 14,894 | 9,739 | 13,956 | |
| 1989 | 109,173 | 16,014 | 14,440 | 9,584 | 13,155 | |

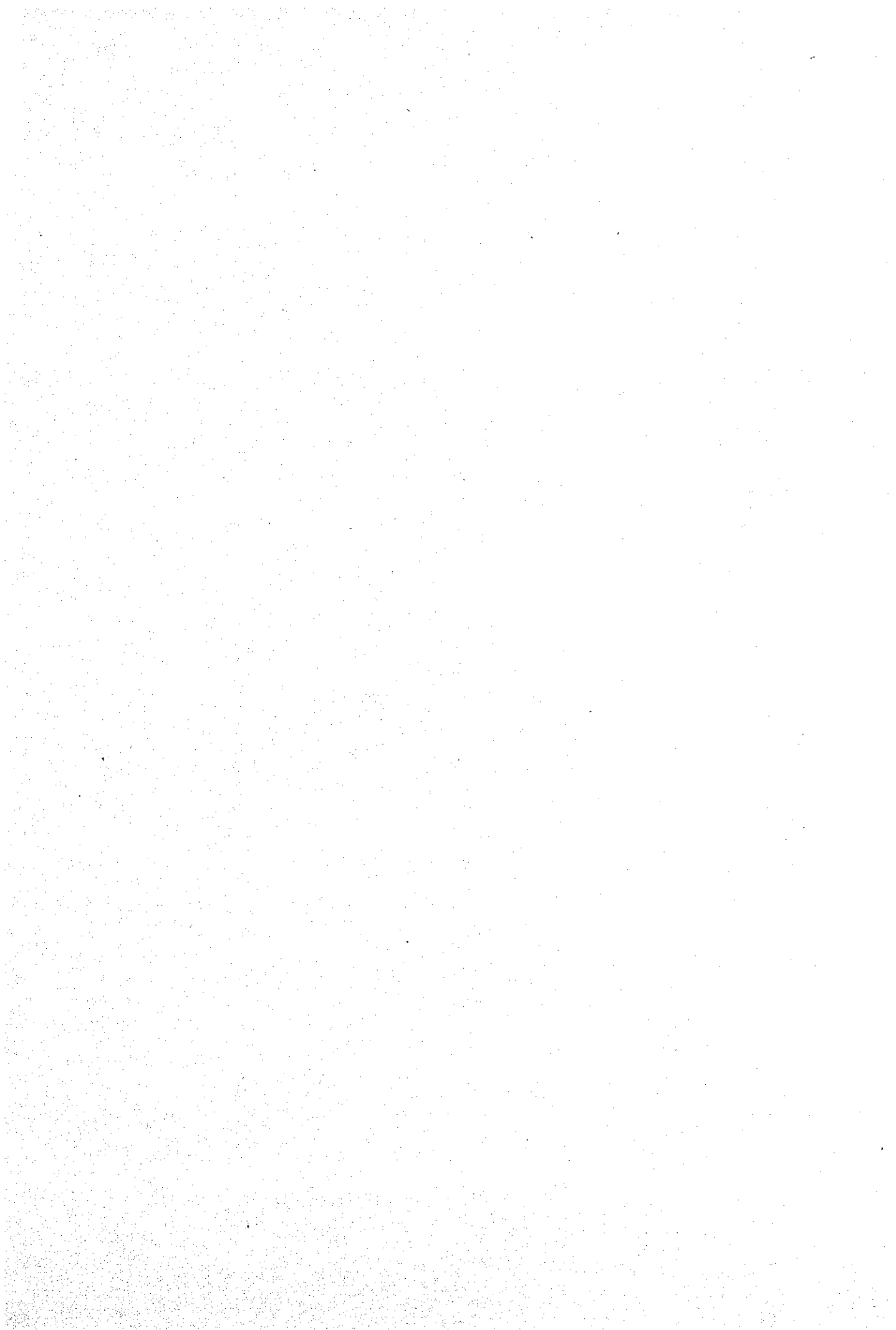
Appendix II-1.3 Major cargo commodities of Iran (Mn. S)

| EXPORT ITEMS | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 |
|---------------------------------|----------|----------|----------|----------|----------|
| CRUDE OIL | 10,755.0 | 9,673.1 | 12,017.0 | 17,441.0 | 15,802.0 |
| CARPET | 482.3 | 308.8 | 344.7 | 509.1 | 1,128.4 |
| FRUITE | 271.7 | 252.6 | 319.1 | 328.2 | 412.8 |
| CAVIAR | 33.9 | 43.5 | 35.7 | 43.5 | 39.1 |
| COTTON | 10.0 | 0.4 | 1.7 | 2.0 | 2.4 |
| COPPER BAR | 41.8 | 143.7 | 17.6 | 152.3 | 178.2 |
| METAL ORES | 38.3 | 32.8 | 45.9 | 50.5 | 55.6 |
| LEATHER | 107.4 | 78.4 | 94.5 | 60.5 | 74.5 |
| OTHER | 175.6 | 176.2 | 184.8 | 180.9 | 722.0 |
| TOTAL | 11,915.8 | 10,709.1 | 13,081.0 | 18,768.0 | 18,415.0 |
| TOTAL (NON OIL) | 1,161.0 | 1,036.4 | 1,044.0 | 1,327.0 | 2,613.0 |
| IMPORT ITEMS | | | | | |
| FOOD STUFF & MEDICINE | 1,474.6 | 1,195.1 | 2,639.4 | 2,358.0 | 3,153.4 |
| CHEMI. PRODUCTS | 915.8 | 938.8 | 1,506.9 | 1,625.0 | 2,173.6 |
| IRON & STEEL | 1,065.1 | 833.7 | 1,209.9 | 3,071.7 | 4,105.8 |
| TRNSP. VEHICLES & MACHIN. TOOLS | 3,985.9 | 2,626.2 | 3,234.7 | 5,846.7 | 7,816.3 |
| OTHER | 5,794.6 | 5,925.2 | 6,075.1 | 7,624.6 | 10,195.9 |
| TOTAL | 13,236.0 | 11,519.0 | 14,666.0 | 20,526.0 | 27,445.0 |
| CRUDE OIL | 10,755.0 | 9,673.1 | 12,017.0 | 17,441.0 | 15,802.0 |
| PRICE AVE. S | 16.7 | 13.9 | 16.6 | 21.0 | 16.3 |
| QUANTITY ML. | 564.3 | 601.2 | 665.4 | 811.8 | 897.9 |
| EXPORT VALUE | 9,423.6 | 8,356.1 | 11,045.6 | 17,047.0 | 14,635.8 |

Appendix II-1.4 Total imports and exports value of Arab countries

(SOURCE: WORLD TABLES 1993). (*: UN DATA)

| TOTAL | IRAN | BAHRAIN | QATAR* | SAUDI ARABIA | UNITED ARAB | KUWAIT | YEMEN* | OMAN | TURKEY | AFGHAN* |
|--------|--------|---------|--------|--------------|-------------|--------|--------|-------|--------|---------|
| 1980 | 25,481 | 7,274 | 7,158 | 139,070 | 28,774 | 26,988 | 2,602 | 5,480 | 10,483 | 1,511 |
| 1981 | 24,927 | 5,984 | 7,362 | 154,955 | 29,149 | 23,269 | 2,530 | 6,984 | 13,566 | 1,580 |
| 1982 | 30,525 | 7,198 | 6,452 | 119,598 | 25,092 | 19,144 | 2,342 | 7,120 | 14,540 | 1,670 |
| 1983 | 37,698 | 6,461 | 4,753 | 84,772 | 23,108 | 18,915 | 2,405 | 7,044 | 14,219 | 1,793 |
| 1984 | 27,792 | 6,735 | 5,675 | 71,018 | 21,254 | 19,171 | 2,421 | 6,925 | 17,797 | 2,023 |
| 1985 | 24,963 | 6,055 | 4,680 | 50,920 | 20,779 | 16,492 | 2,052 | 7,948 | 19,298 | 1,751 |
| 1986 | 18,843 | 4,605 | 1,099 | 39,264 | 22,614 | 13,100 | 1,677 | 5,157 | 18,562 | 1,956 |
| 1987 | 20,606 | 5,143 | 1,161 | 43,126 | 23,992 | 13,757 | 1,479 | 5,589 | 24,353 | 1,508 |
| 1988 | 17,608 | 5,005 | 1,267 | 45,985 | 26,272 | 13,804 | 0 | 5,416 | 25,997 | 1,333 |
| 1989 | 24,167 | 5,965 | 0 | 48,640 | 28,801 | 17,658 | 0 | 6,111 | 27,414 | 1,036 |
| 1990 | 31,034 | 7,472 | 0 | 68,486 | 31,092 | 17,934 | 0 | 3,066 | 35,259 | 0 |
| 1991 | 37,604 | 7,541 | 0 | 80,276 | 34,805 | 17,934 | 0 | 0 | 34,632 | 0 |
| IMPORT | IRAN | BAHRAIN | QATAR | SAUDI | UNITED | KUWAIT | YEMEN | OMAN | TURKEY | AFGHAN |
| 1980 | 12,246 | 3,479 | 1,447 | 29,957 | 8,098 | 6,554 | 2,537 | 1,732 | 7,573 | 841 |
| 1981 | 14,693 | 1,637 | 1,518 | 35,042 | 8,800 | 6,969 | 2,461 | 2,288 | 8,864 | 886 |
| 1982 | 11,955 | 3,615 | 1,945 | 40,473 | 8,601 | 8,283 | 2,278 | 2,682 | 8,793 | 962 |
| 1983 | 18,320 | 3,262 | 1,456 | 38,911 | 8,436 | 7,375 | 2,349 | 2,492 | 8,548 | 1,064 |
| 1984 | 15,370 | 3,531 | 1,162 | 33,473 | 7,062 | 6,896 | 2,378 | 2,748 | 10,663 | 1,390 |
| 1985 | 11,635 | 3,159 | 1,139 | 23,439 | 6,745 | 6,005 | 1,998 | 3,153 | 11,340 | 1,194 |
| 1986 | 10,521 | 2,405 | 1,099 | 19,079 | 6,777 | 5,717 | 1,640 | 2,384 | 11,105 | 1,404 |
| 1987 | 9,570 | 2,714 | 1,161 | 19,927 | 7,226 | 5,493 | 1,378 | 1,813 | 14,163 | 996 |
| 1988 | 9,454 | 2,593 | 1,267 | 21,608 | 8,522 | 6,143 | 0 | 2,148 | 14,335 | 900 |
| 1989 | 12,807 | 3,134 | 0 | 20,258 | 10,010 | 6,182 | 0 | 2,178 | 15,788 | 798 |
| 1990 | 15,716 | 3,711 | 0 | 24,069 | 11,199 | 6,150 | 0 | 2,608 | 22,300 | 0 |
| 1991 | 21,628 | 4,073 | 0 | 25,540 | 13,746 | 6,150 | 0 | 0 | 21,038 | 0 |
| EXPORT | IRAN | BAHRAIN | QATAR | SAUDI | UNITED | KUWAIT | YEMEN | OMAN | TURKEY | AFGHAN |
| 1980 | 13,235 | 3,795 | 5,711 | 109,113 | 20,676 | 20,434 | 65 | 3,748 | 2,910 | 670 |
| 1981 | 10,234 | 4,347 | 5,844 | 119,913 | 20,349 | 16,300 | 69 | 4,696 | 4,702 | 694 |
| 1982 | 18,570 | 3,583 | 4,507 | 79,125 | 16,491 | 10,861 | 64 | 4,438 | 5,747 | 708 |
| 1983 | 19,378 | 3,199 | 3,297 | 45,861 | 14,672 | 11,540 | 56 | 4,552 | 5,671 | 729 |
| 1984 | 12,422 | 3,204 | 4,513 | 37,545 | 14,192 | 12,275 | 43 | 4,177 | 7,134 | 633 |
| 1985 | 13,328 | 2,897 | 3,541 | 27,481 | 14,034 | 10,487 | 54 | 4,795 | 7,958 | 557 |
| 1986 | 8,322 | 2,200 | 0 | 20,185 | 15,837 | 7,383 | 37 | 2,773 | 7,457 | 552 |
| 1987 | 11,036 | 2,429 | 0 | 23,199 | 16,766 | 8,264 | 101 | 3,776 | 10,190 | 512 |
| 1988 | 8,154 | 2,411 | 0 | 24,377 | 17,750 | 7,661 | 0 | 3,268 | 11,662 | 433 |
| 1989 | 11,360 | 2,831 | 0 | 28,382 | 18,791 | 11,476 | 0 | 3,933 | 11,626 | 238 |
| 1990 | 15,318 | 3,761 | 0 | 44,417 | 19,893 | 11,783 | 0 | 458 | 12,959 | 0 |
| 1991 | 15,916 | 3,469 | 0 | 54,736 | 21,059 | 11,783 | 0 | 0 | 13,594 | 0 |



Appendix II-1.5 Cargo and value & quantity by region
(exclude oil, oil products)

| 1990 | IMPORT | | EXPORT | | EXPORT | | TOTAL | |
|----------------|-----------|--------------------|----------|--------------------|----------|--------------------|-----------|--------------------|
| | ML. IRLS | QUANTITY THU. TONS | ML. IRLS | QUANTITY THU. TONS | ML. IRLS | QUANTITY THU. TONS | ML. IRLS | QUANTITY THU. TONS |
| TOTAL | 1,261,251 | 100.0% | 19,532 | 100.0% | 87,245 | 100.0% | 1,348,496 | 20,774 |
| KISH | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| AFGAN PAKISTAN | 3,453 | 0.3% | 40 | 0.2% | 482 | 0.6% | 3,935 | 53 |
| TURKEY | 48,986 | 3.9% | 1,029 | 5.3% | 7,058 | 8.1% | 55,994 | 1,168 |
| CIS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| ARAB | 2,700 | 0.2% | 12 | 0.1% | 565 | 0.6% | 3,265 | 14 |
| PERSIAN GULF | 71,908 | 5.7% | 757 | 3.9% | 10,573 | 12.1% | 82,481 | 1,175 |
| OCEANIA | 47,617 | 3.8% | 2,747 | 14.1% | 139 | 0.2% | 47,755 | 2,747 |
| NORTH AMERICA | 32,041 | 2.5% | 1,226 | 6.3% | 883 | 1.0% | 32,924 | 1,227 |
| EF ASIA | 189,682 | 15.0% | 1,519 | 7.8% | 6,207 | 7.1% | 195,888 | 1,669 |
| SE ASIA | 45,094 | 3.6% | 1,263 | 6.5% | 3,207 | 3.7% | 48,301 | 1,510 |
| MEDITERRANEAN | 127,948 | 10.1% | 1,202 | 6.2% | 11,941 | 13.7% | 139,889 | 1,300 |
| WEST EUROPE | 543,096 | 43.1% | 3,694 | 18.9% | 43,621 | 50.0% | 586,717 | 3,822 |
| EAST EUROPE | 56,219 | 4.5% | 1,943 | 9.9% | 2,285 | 2.6% | 58,504 | 1,956 |
| SOUTH AMERICA | 88,076 | 7.0% | 3,799 | 19.5% | 41 | 0.0% | 88,117 | 3,800 |
| AFRICA | 4,482 | 0.4% | 303 | 1.5% | 240 | 0.3% | 4,722 | 332 |
| OTHERS | 0 | 0.0% | 0 | 0.0% | 3 | 0.0% | 3 | 1 |
| TOTAL | 927,257 | 100.0% | 19,240 | 100.0% | 74,736 | 100.0% | 1,001,993 | 20,695 |
| KISH | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| AFGAN PAKISTAN | 10,461 | 1.1% | 179 | 0.9% | 105 | 0.1% | 10,566 | 192 |
| TURKEY | 50,245 | 5.4% | 1,258 | 6.5% | 394 | 0.5% | 50,638 | 1,292 |
| CIS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| ARAB | 15,396 | 1.7% | 363 | 1.9% | 425 | 0.6% | 15,821 | 365 |
| PERSIAN GULF | 53,747 | 5.8% | 1,296 | 6.7% | 10,759 | 14.4% | 64,506 | 1,609 |
| OCEANIA | 45,832 | 4.9% | 2,087 | 10.8% | 261 | 0.3% | 46,093 | 2,087 |
| NORTH AMERICA | 29,902 | 3.2% | 1,834 | 9.5% | 811 | 1.1% | 30,713 | 1,834 |
| EF ASIA | 114,851 | 12.4% | 987 | 5.1% | 5,409 | 7.2% | 120,260 | 1,208 |
| SE ASIA | 34,605 | 3.7% | 721 | 3.7% | 2,939 | 4.0% | 37,594 | 1,088 |
| MEDITERRANEAN | 76,432 | 8.2% | 662 | 3.4% | 11,693 | 15.6% | 88,125 | 799 |
| WEST EUROPE | 353,276 | 38.1% | 3,515 | 18.3% | 38,457 | 51.5% | 391,734 | 3,677 |
| EAST EUROPE | 51,655 | 5.6% | 1,439 | 7.5% | 2,035 | 2.7% | 53,690 | 1,471 |
| SOUTH AMERICA | 65,876 | 7.1% | 3,593 | 18.7% | 137 | 0.2% | 66,014 | 3,598 |
| AFRICA | 7,059 | 0.8% | 391 | 2.0% | 1,254 | 1.7% | 8,313 | 559 |
| OTHERS | 17,921 | 1.9% | 916 | 4.8% | 7 | 0.0% | 17,928 | 916 |
| TOTAL | 567,923 | 100.0% | 10,786 | 100.0% | 71,474 | 100.0% | 639,397 | 12,011 |
| KISH | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| AFGAN PAKISTAN | 2,786 | 0.5% | 32 | 0.3% | 210 | 0.3% | 2,996 | 58 |
| TURKEY | 29,529 | 5.2% | 813 | 7.5% | 234 | 0.3% | 29,763 | 832 |
| CIS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| ARAB | 7,793 | 1.4% | 57 | 0.5% | 649 | 0.9% | 8,441 | 60 |
| PERSIAN GULF | 21,572 | 3.8% | 848 | 7.9% | 10,429 | 14.6% | 32,001 | 1,227 |
| OCEANIA | 20,274 | 3.6% | 1,397 | 13.0% | 156 | 0.2% | 20,431 | 1,398 |
| NORTH AMERICA | 7,138 | 1.3% | 467 | 4.3% | 614 | 0.9% | 7,752 | 467 |
| EF ASIA | 74,522 | 13.1% | 521 | 4.8% | 3,643 | 5.1% | 78,165 | 661 |
| SE ASIA | 27,432 | 4.8% | 435 | 4.0% | 1,739 | 2.4% | 29,171 | 638 |
| MEDITERRANEAN | 37,431 | 6.6% | 246 | 2.3% | 7,700 | 10.8% | 45,132 | 266 |
| WEST EUROPE | 253,202 | 44.6% | 2,654 | 24.6% | 39,125 | 54.7% | 292,327 | 2,775 |
| EAST EUROPE | 39,724 | 7.0% | 1,484 | 13.8% | 5,259 | 7.4% | 44,983 | 1,573 |
| SOUTH AMERICA | 38,855 | 6.9% | 1,790 | 16.6% | 418 | 0.5% | 39,274 | 1,814 |
| AFRICA | 1,389 | 0.2% | 43 | 0.4% | 1,298 | 1.8% | 2,687 | 240 |
| OTHERS | 6,275 | 1.1% | 0 | 0.0% | 0 | 0.0% | 6,276 | 1 |
| TOTAL | 808,855 | 100.0% | 13,504 | 100.0% | 81,107 | 100.0% | 889,962 | 14,638 |
| KISH | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| AFGAN PAKISTAN | 4,337 | 0.5% | 145 | 1.1% | 290 | 0.4% | 4,627 | 170 |
| TURKEY | 33,350 | 4.1% | 1,080 | 8.0% | 718 | 0.9% | 34,048 | 1,114 |
| CIS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 |
| ARAB | 3,314 | 0.4% | 55 | 0.4% | 505 | 0.6% | 3,819 | 60 |
| PERSIAN GULF | 28,753 | 3.6% | 672 | 5.0% | 11,081 | 13.7% | 39,834 | 1,045 |
| OCEANIA | 138,824 | 17.2% | 2,773 | 20.5% | 204 | 0.3% | 139,028 | 2,774 |
| NORTH AMERICA | 25,692 | 3.2% | 553 | 4.1% | 4,445 | 5.5% | 30,137 | 555 |
| EF ASIA | 100,848 | 12.5% | 854 | 6.3% | 3,967 | 4.9% | 104,815 | 937 |
| SE ASIA | 26,079 | 3.2% | 920 | 6.8% | 1,212 | 1.5% | 27,291 | 1,103 |
| MEDITERRANEAN | 48,601 | 6.0% | 268 | 2.0% | 8,499 | 10.5% | 57,101 | 309 |
| WEST EUROPE | 260,669 | 32.2% | 1,986 | 14.7% | 41,851 | 51.6% | 302,520 | 2,154 |
| EAST EUROPE | 41,579 | 5.1% | 1,618 | 12.0% | 7,383 | 9.1% | 48,962 | 1,781 |
| SOUTH AMERICA | 84,077 | 10.4% | 2,394 | 17.7% | 149 | 0.2% | 84,226 | 2,407 |
| AFRICA | 2,885 | 0.4% | 187 | 1.4% | 499 | 0.6% | 3,384 | 196 |
| OTHERS | 9,867 | 1.2% | 0 | 0.0% | 305 | 0.4% | 10,172 | 33 |

SOURCE : CUSTOMS OFFICE

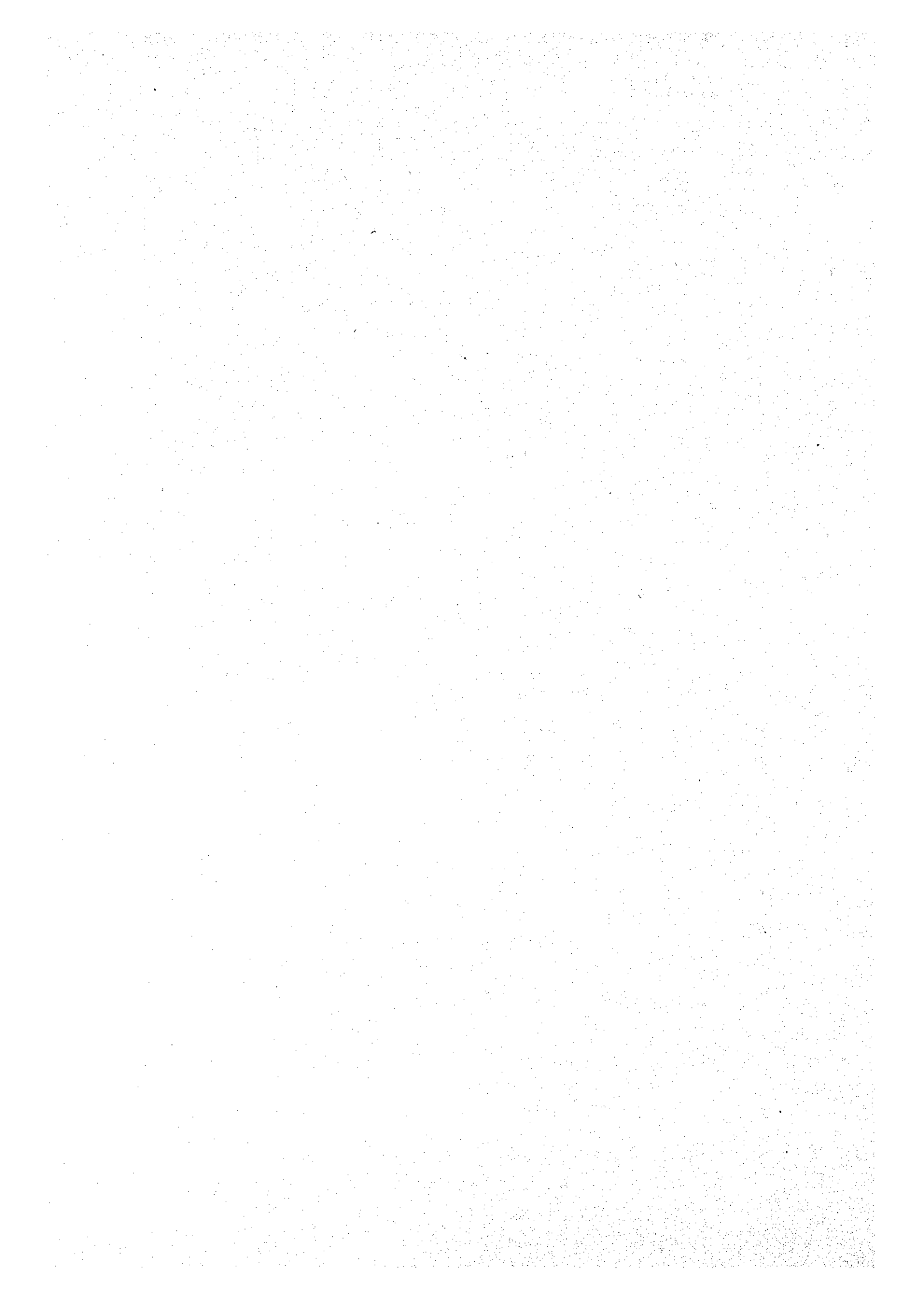
Appendix II-1.6 Import value and volume by countries
(Mn.RLS, THOU. TONS)

| COUNTRY | 1985 | | 1986 | | 1987 | | 1988 | | 1989 | | 1990 | | 1991 | | 1992 | |
|--------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|-----------|---------|--------|--------|
| | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME |
| TOTAL | 1,056,345 | 1,999 | 720,691 | 1,055 | 808,855 | 13,504 | 567,923 | 10,786 | 927,257 | 19,240 | 1,261,251 | 19,532 | 2,009,952 | 21,113 | 2,113 | 0.4 |
| KISH | | | | | | | | | | | | | | | | |
| PAKISTAN | | | 4,304 | 145.4 | 2,742 | 31.0 | 10,455 | 179.0 | 3,286 | 40.3 | 5,882 | 186.2 | | | | |
| AFGHANISTAN | | | 33 | 0.0 | 44 | 0.7 | 5 | 0.0 | 157 | 0.0 | 2 | 0.0 | | | | |
| TURKEY | 75,232 | 1,999.4 | 45,216 | 1,054.5 | 31,330 | 1,080.0 | 29,529 | 812.7 | 50,245 | 1,257.5 | 48,936 | 1,029.1 | 43,736 | 593.1 | 13,425 | 732.1 |
| AZERBAIDJAN | | | | | | | | | | | | | 13,425 | 732.1 | | |
| TURKMENISTAN | | | | | | | | | | | | | 495 | 3.0 | | |
| TADZHIKISTAN | | | | | | | | | | | | | 28 | 0.1 | | |
| KYRGYZSTAN | | | | | | | | | | | | | 28 | 0.1 | | |
| KAZAKHSTAN | | | | | | | | | | | | | 13 | 0.0 | | |
| LEBANON | | | | | | | | | | | | | 286 | 9.4 | | |
| SYRIA | 3,168 | | 914 | | 6,883 | 14.8 | 8,878 | 11.0 | 2,005 | 2.8 | 435 | 3.9 | 435 | 3.9 | | |
| SAUDI ARAB | | | 2,582 | 4.3 | 6,883 | 42.1 | 6,382 | 351.5 | 481 | 8.3 | 5,242 | 285.1 | 5,242 | 285.1 | | |
| JORDAN | | | 732 | 50.7 | 910 | | | | | | 1,234 | 72.7 | | | | |
| ARMENIA | | | | | | | | | | | | | 143 | 1.7 | | |
| BAHRAIN | 82,400 | 1,999.4 | 46,130 | 1,054.5 | 40,107 | 801.2 | 76,102 | 1,798.5 | 55,089 | 1,081 | 72,434 | 1,863.1 | | | | |
| QATAR | | | 283 | 5.7 | 5 | 0.0 | 239 | 35.2 | 531 | 2.9 | 1,805 | 112.9 | | | | |
| OMAN | | | 359 | 27.0 | 2,133 | 157.3 | 273 | 8.5 | 1,485 | 61.4 | 1,788 | 8.3 | | | | |
| KUWAIT | | | 402 | 15.2 | 103 | 1.4 | 146 | 0.4 | 197 | 0.7 | 100 | 5.5 | | | | |
| ABU DHABI | | | 301 | 1.8 | 132 | 0.8 | 1,872 | 8.0 | 4,282 | 17.6 | 4,018 | 47.4 | | | | |
| DUBAY | | | 1,237 | 71.1 | 4,670 | 183.4 | | | 3 | 0.0 | 563 | 47.4 | | | | |
| U. A. E. (1) | 30,924 | | 41,343 | | 5,468 | 367.4 | 51,218 | 1,243.3 | 57,831 | 614.0 | 93,910 | 741.8 | | | | |
| REST. A. E. | 30,924 | | 41,343 | | 5,468 | 367.4 | | | 7,618 | 60.3 | 5,017 | 83.5 | | | | |
| NEWZEALAND | | | | | 21,572 | 848.4 | 53,747 | 1,295.8 | 71,908 | 757 | 107,200 | 1,028.9 | | | | |
| AUSTRALIA | 27,849 | | 18,749 | | 5,274 | 57.5 | 13,152 | 87.6 | 1,521 | 9.0 | 8,781 | 68.4 | | | | |
| U. S. A. | 6,215 | | 5,107 | | 24,593 | 57.5 | 5,486 | 464.9 | 27,772 | 1,829.3 | 27,863 | 1,138.7 | 38,737 | 1,722.8 | | |
| CANADA | 6,215 | | 5,107 | | 24,593 | 57.5 | 5,486 | 464.9 | 27,772 | 1,829.3 | 27,863 | 1,138.7 | 38,737 | 1,722.8 | | |
| JAPAN | 142,056 | | 97,627 | | 74,088 | 349.5 | 58,066 | 293.4 | 70,439 | 430.3 | 130,248 | 777.0 | 240,824 | 791.4 | | |
| TAIWAN | | | 4,619 | | 4,754 | 89.5 | 5,291 | 74.8 | 2,898 | 11.6 | 9,907 | 24.4 | | | | |
| N. KOREA | | | 9 | | 0 | 0.0 | 0 | 0.0 | 143 | 5.1 | 893 | 39 | | | | |
| HONG KONG | | | 1,391 | | 380 | 0.2 | 941 | 4.2 | 1,257 | 3.4 | 1,282 | 5.1 | | | | |
| CHINA | | | 3,747 | | 2,486 | 20.6 | 3,450 | 44.7 | 11,613 | 201.6 | 22,127 | 520.5 | | | | |
| S. KOREA | 25,810 | | 18,008 | | 17,014 | 314.0 | 8,836 | 117.0 | 34,577 | 427.7 | 42,772 | 487.8 | 44,271 | 319.3 | | |
| INDONESIA | 187,868 | | 115,635 | | 100,848 | 844.1 | 74,522 | 520.7 | 114,851 | 986.7 | 189,582 | 1,518.6 | 318,461 | 1,681.1 | | |
| THAILAND | | | | | | | | | | | | | | | | |
| RESTASIA | 10,510 | | 11,875 | | 26,079 | 918.8 | 27,432 | 434.9 | 34,605 | 721.4 | 45,094 | 1,262.7 | 75,182 | 2,017.7 | | |
| PHILIPPINE | | | 386 | | 27.9 | 1.440 | 77.7 | 0.0 | 0.0 | 0.0 | 133 | 2.8 | 3,438 | 86.5 | | |
| MALAYSIA | | | 381 | | 3.4 | 826 | 7.1 | 2,323 | 49.9 | 1,960 | 104.4 | 2,687 | 30.9 | | | |
| S. VIETNAM | | | | | | | | | | | | | | | | |
| VIETNAM | | | | | | | | | | | | | | | | |
| BANGLADESH | | | 2,577 | | 1,186 | 23.4 | 3,196 | 46.1 | 3,384 | 48.7 | 5,285 | 76.6 | | | | |
| SRI LANKA | | | 544 | | 4.1 | 4,298 | 30.2 | 1,456 | 15.2 | 3,529 | 19.4 | 5,771 | 36.4 | | | |
| INDIA | 6,629 | | 6,175 | | 7,590 | 233.2 | 8,623 | 61.8 | 3,399 | 57.3 | 7,044 | 341.5 | 15,999 | 1,076.9 | | |
| INDONESIA | | | 1,105 | | 30.7 | 734 | 10.1 | 5,015 | 60.9 | 4,355 | 54.6 | 13,132 | 53.8 | | | |
| SINGAPORE | 3,881 | | 5,700 | | 3,815 | 47.2 | 5,328 | 52.8 | 5,554 | 39.7 | 7,446 | 35.4 | 11,252 | 35.4 | | |
| THAILAND | | | 9,589 | | 517.4 | 4,893 | 170.8 | 13,433 | 442.5 | 13,336 | 593.3 | 16,006 | 594.3 | | | |
| RESTASIA | | | | | | | | | | | | | | | | |
| GREECE | | | 203 | | 147 | 0.8 | 572 | 3.7 | 1,207 | 9.7 | 1,703 | 14.2 | | | | |
| ITALY | 48,623 | | 46,920 | | 40,006 | 112.6 | 28,980 | 135.4 | 58,189 | 238.6 | 101,026 | 583.0 | 188,876 | 476.3 | | |
| MOROCCO | | | | | | | | | 983 | 5.163 | 341.5 | 803 | | | | |
| CYPRUS | | | | | 55 | 1.1 | 143 | 0.0 | 183 | 0.9 | 203 | 0.9 | | | | |
| SPAIN | 18,505 | | 10,259 | | 7,418 | 139.3 | 7,646 | 98.3 | 15,892 | 282.0 | 18,367 | 288.1 | 20,776 | 130.9 | | |
| PORTUGUE | | | 965 | | 603 | 10.1 | 544 | 0.9 | 742 | 5.7 | 2,008 | 26.3 | | | | |
| MALT | | | 9 | | 0.0 | 0.0 | 0.0 | 0.0 | 11 | 0.4 | 218 | 6 | | | | |
| ALBANIA | | | | | | | | | | | | | | | | |
| ESTONIA | | | | | | | | | | | | | | | | |
| AUSTRIA | 22,052 | | 12,564 | | 10,298 | 137.5 | 11,188 | 134.8 | 16,379 | 252.4 | 30,318 | 287.0 | 36,927 | 220.9 | | |
| CZECHOSLOVIA | | | 4,554 | | 86.3 | 44.7 | 4,082 | 31.8 | 4,584 | 49.2 | 10,999 | 136.9 | | | | |
| BELGIUM | 30,615 | | 26,236 | | 22,240 | 515.6 | 27,292 | 666.1 | 35,730 | 702.6 | 59,821 | 815.0 | 69,821 | 633.6 | | |
| N. GERMANY | 167,681 | | 131,543 | | 128,195 | 520.8 | 102,289 | 627.5 | 146,566 | 585.6 | 231,148 | 1,023.3 | 492,415 | 1,052.5 | | |
| DENMARK | 8,797 | | 7,315 | | 7,396 | 72.6 | 7,085 | 80.3 | 10,089 | 170.6 | 9,914 | 51.1 | 15,660 | 97.4 | | |
| E. GERMANY | | | | | 2,459 | 20.0 | 4,417 | 21.5 | 9,917 | 22.1 | 22.1 | 0.0 | | | | |
| ENGLAND | 59,770 | | 48,856 | | 38,694 | 229.7 | 38,605 | 281.1 | 41,051 | 350.7 | 68,380 | 292.8 | 110,988 | 394.5 | | |
| FINLAND | | | 3,175 | | 3,303 | 48.9 | 4,965 | 67.5 | 9,041 | 89.7 | 9,041 | 89.7 | 9,000 | 76.7 | | |
| NORWAY | | | 6.7 | | 555 | 5.3 | 2,481 | 104.0 | 3,153 | 41.2 | 4,312 | 26.8 | | | | |
| FRANCE | 6,065 | | 3,674 | | 6,368 | 34.0 | 16,857 | 409.0 | 19,253 | 748.9 | 32,936 | 389.0 | 53,886 | 2,274.5 | | |
| NETHERLAND | 25,501 | | 22,549 | | 16,342 | 226.1 | 19,833 | 187.2 | 29,659 | 294.8 | 38,845 | 294.8 | 44,065 | 506.6 | | |
| LUXEMBURG | | | | | 23 | 0.0 | 27 | 0.0 | 27 | 0.0 | 117 | 0.2 | 126 | 3.2 | | |
| IRELAND | | | 870 | | 1,088 | 5.6 | 7,821 | 73.1 | 1,404 | 2.2 | 1,494 | 3.9 | | | | |
| ICELAND | | | 89 | | 16 | 0.0 | 25 | 0.2 | 35 | 0.3 | 3 | 6.8 | | | | |
| SWEDEN | 16,965 | | 11,002 | | 6,275 | 31.6 | 5,554 | 60.7 | 8,145 | 30.5 | 18,938 | 87.8 | 33,934 | 70.9 | | |
| SWITZERLAN | 85,603 | | 37,689 | | 14,909 | 17.0 | 14,956 | 72.2 | 22,122 | 107.3 | 36,608 | 277.5 | 50,328 | 129.7 | | |
| REST. EUROPE | 423,059 | | 281,408 | | 260,669 | 1,985.8 | 253,202 | 2,653.7 | 353,276 | 3,515.3 | 543,096 | 3,693.9 | 933,187 | 5,594.7 | | |
| ESTONIA | | | | | | | | | | | | | | | | |
| BULGARIA | 14,516 | | 6,870 | | 7,442 | 160.3 | 6,527 | 74.7 | 7,511 | 58.5 | 3,842 | 19.4 | 4,372 | 80.4 | | |
| HUNGARY | | | 4,564 | | 79.4 | 18.6 | 2,878 | 51.5 | 4,506 | 79.1 | 5,870 | 144.3 | 8,140 | 69.1 | | |
| POLAND | | | 1,814 | | 18.6 | 4.6 | 7,882 | 197.3 | 3,308 | 37.7 | 9,195 | 292.7 | | | | |
| ROMANIA | 35,150 | | 6,551 | | 6,713 | 161.5 | 6,640 | 157.3 | 14,504 | 988.8 | 20,525 | 1,293.3 | 21,711 | 767.3 | | |
| U.S.S.R. | 10,203 | | 7,143 | | 13,908 | 1,126.4 | 15,092 | 1,123.3 | 14,504 | 988.8 | 20,525 | 1,293.3 | 21,711 | 767.3 | | |
| YUGOSLAVIA | 10,497 | | 6,601 | | 7,138 | 132.0 | 8,587 | 147.1 | 12,215 | 110.7 | 14,175 | 235.5 | 10,038 | 75.1 | | |
| REST. EUROPE | 70,366 | | 27,165 | | 41,579 | 1,816.2 | 39,724 | 1,484.2 | 51,655 | 1,493.2 | 56,219 | 1,943 | 60,406 | 1,409.7 | | |
| BRAZIL | 23,120 | | 18,914 | | 38,843 | 798.2 | 23,807 | 678.2 | 28,241 | 1,139.3 | | | | | | |

Appendix II-1.7 Export value and volume by countries
(Mn.RLS, THOU.TONS)

| COUNTRY | 1985 | | 1986 | | 1987 | | 1988 | | 1989 | | 1990 | | 1992 | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME | VALUE | VOLUME |
| TOTAL | 41,834 | 10 | 70,585 | 1,134 | 71,474 | 1,224 | 74,736 | 1,455 | 87,245 | 1,242 | 195,027 | 3,438 | 2,361 | 71.0 |
| PAKISTAN | | | | | 290 | 24.6 | 210 | 26.3 | 100 | 12.1 | 462 | 11.7 | 2,361 | 71.0 |
| AFGHANISTAN | 999 | 9.9 | 468 | 33.8 | 718 | 234 | 19.6 | 5 | 0.9 | 20 | 0.5 | 23,334 | 30.7 | |
| TURKEY | | | | | | | | 394 | 34.4 | 7,058 | 139.3 | 1,835 | 217.4 | |
| AZERBAIDJAN | | | | | | | | | | | | 1,364 | 21.4 | |
| TURKMENISTAN | | | | | | | | | | | | 1,110 | 10.2 | |
| ARMENIA | | | | | | | | | | | | 80 | 0.8 | |
| GEORGIA | | | | | | | | | | | | 80 | 0.1 | |
| TADZHIKISTAN | | | | | | | | | | | | 80 | 0.4 | |
| LEBANON | | | | | | | | | | | | 284 | 0.8 | |
| SYRIA | | | | | | | | | | | | 88 | 0.5 | |
| SAUDI ARAB | | | | | | | | | | | | 193 | 0.7 | |
| JORDAN | 589 | 10 | 468 | 63 | 1,093 | 49 | 974 | 49.1 | 8,105 | 154 | 33,003 | 361 | 278 | 1.6 |
| BAHRAIN | | | | | | | | | | | | 51 | 1.7 | |
| QATAR | | | | | | | | | | | | 1.5 | 47.5 | |
| OMAN | | | | | | | | | | | | 13.2 | 1,187 | |
| KUWAIT | | | | | | | | | | | | 0.1 | 30.6 | |
| KUWAIT | 442 | | 416 | 8.0 | 316 | 33.9 | 33 | 3.9 | 225 | 34.6 | 3,338 | 55.9 | 118 | 1.0 |
| ARUBABI | | | | | | | | | | | | 3.0 | 221 | |
| DUBAY | | | | | | | | | | | | 3.0 | 8.5 | |
| U.A.E.(1) | 5,733 | | 12,508 | 330.9 | 9,392 | 318.6 | 9,585 | 221.3 | 9,723 | 334.8 | 17,407 | 357.2 | 17,407 | 357.2 |
| REST.A.E | 6,175 | 0 | 12,324 | 27.3 | 585 | 37.0 | 673 | 45.0 | 383 | 31.0 | 4,077 | 434.3 | 4,077 | 434.3 |
| NEWZEALAND | | | | | | | | | | | | 11 | 0.1 | |
| AUSTRALIA | 0 | 0 | 0 | 0 | 204 | 1 | 251 | 0.4 | 139 | 0.3 | 422 | 2.0 | 360 | 2.0 |
| U.S.A | 144 | | 344 | 1.8 | 555 | 0.2 | 811 | 0.7 | 878 | 0.6 | 3,311 | 9.7 | 936 | 0.1 |
| CANADA | 144 | 0 | 344 | 3 | 614 | 0 | 811 | 0.7 | 883 | 1 | 4,247 | 10 | 4,247 | 10 |
| JAPAN | 342 | | 984 | 39.5 | 2,548 | 41.8 | 3,789 | 75.0 | 3,463 | 37.2 | 5,381 | 311.9 | 5,381 | 311.9 |
| TAIWAN | 0 | | 66 | 26.0 | 542 | 63.2 | 205 | 11.9 | 75 | 1.6 | 534 | 23.0 | 534 | 23.0 |
| R.KOREA | | | | | | | | | | | | 605 | 0.0 | |
| HONG KONG | | | | | | | | | | | | 102 | 0.3 | |
| INDONESIA | 373 | | 929 | 39.3 | 365 | 48.5 | 666 | 134.1 | 1,820 | 100.0 | 1,137 | 135.9 | 1,137 | 135.9 |
| CHINA | 0 | | 0 | 0.2 | 271 | 15.5 | 506 | 41.2 | 275 | 31.0 | 32 | 8.7 | 32 | 8.7 |
| SINGAPORE | 14 | | 219 | 3.2 | 422 | 4.7 | 1,258 | 21.1 | 996 | 28.3 | 453 | 0.7 | 453 | 0.7 |
| THAILAND | | | | | | | | | | | | 151 | 0.3 | |
| MYANMAR | | | | | | | | | | | | 151 | 0.3 | |
| RESTASIA | 387 | 0 | 1,153 | 0.1 | 35 | 0.5 | 2,989 | 387.0 | 3,207 | 247 | 2,041 | 196 | 93,565 | 5 |
| PHILIPPINE | | | | | | | | | | | | 4 | 0.0 | |
| MALAYSIA | | | | | | | | | | | | 19 | 0.0 | |
| S.VIETNAM | | | | | | | | | | | | 11 | 0.1 | |
| VIETNAM | | | | | | | | | | | | 11 | 0.1 | |
| BAKLADESH | 0 | | 5 | 138.2 | 521 | 117.6 | 495 | 139.2 | 294 | 88.0 | 6 | 0.6 | 6 | 0.6 |
| SRI LANKA | | | | | | | | | | | | 0.5 | 0.8 | |
| INDIA | 373 | | 929 | 39.3 | 365 | 48.5 | 666 | 134.1 | 1,820 | 100.0 | 1,137 | 135.9 | 1,137 | 135.9 |
| INDONESIA | 0 | | 0 | 0.2 | 271 | 15.5 | 506 | 41.2 | 275 | 31.0 | 32 | 8.7 | 32 | 8.7 |
| SINGAPORE | 14 | | 219 | 3.2 | 422 | 4.7 | 1,258 | 21.1 | 996 | 28.3 | 453 | 0.7 | 453 | 0.7 |
| THAILAND | | | | | | | | | | | | 151 | 0.3 | |
| MYANMAR | | | | | | | | | | | | 151 | 0.3 | |
| RESTASIA | 387 | 0 | 1,153 | 0.1 | 35 | 0.5 | 2,989 | 387.0 | 3,207 | 247 | 2,041 | 196 | 93,565 | 5 |
| GREECE | | | | | | | | | | | | 198 | 3.4 | |
| ITALY | 4,750 | | 5,269 | 39.4 | 7,374 | 15.5 | 9,619 | 20.6 | 10,589 | 31.3 | 14,506 | 110.4 | 14,506 | 110.4 |
| MOROCCO | | | | | | | | | | | | 344 | 3 | |
| CYPRUS | 25 | | 245 | 0.1 | 23 | 0.1 | 31 | 0.1 | 73 | 0.2 | 337 | 1.3 | 337 | 1.3 |
| SPAIN | | | | | | | | | | | | 725 | 2.2 | |
| PORTUGUE | | | | | | | | | | | | 31 | 0.1 | |
| MALTA | | | | | | | | | | | | 31 | 0.1 | |
| ALBANIA | 4,775 | 0 | 5,514 | 41.1 | 7,700 | 20.1 | 11,693 | 137.1 | 11,941 | 99 | 16,539 | 118 | 16,539 | 118 |
| AUSTRIA | 707 | | 1,156 | 4.9 | 833 | 1.8 | 1,226 | 4.1 | 1,174 | 2.7 | 2,466 | 4.8 | 2,466 | 4.8 |
| CZECHOSLOVIA | 25 | | 471 | 25.8 | 1,326 | 15.8 | 334 | 4.3 | 127 | 7.5 | 63 | 1.5 | 63 | 1.5 |
| BELGIUM | 211 | | 722 | 1.3 | 494 | 0.6 | 605 | 2.7 | 695 | 1.0 | 1,209 | 12.4 | 1,209 | 12.4 |
| WEST GERMANY | 9,980 | | 21,684 | 47.4 | 19,961 | 36.6 | 25,715 | 55.1 | 26,581 | 57.0 | 48,912 | 192.3 | 48,912 | 192.3 |
| DENMARK | 90 | | 359 | 0.2 | 397 | 0.1 | 319 | 0.3 | 333 | 0.3 | 254 | 0.1 | 254 | 0.1 |
| E.GERMANY | 1,198 | | 1,989 | 15.5 | 2,238 | 7.4 | 321 | 3.3 | 111 | 1.6 | 1,084 | 2.2 | 1,084 | 2.2 |
| ENGLAND | 1,346 | | 1,556 | 38.2 | 6,843 | 38.5 | 1,344 | 3.6 | 3,334 | 34.5 | 4,847 | 18.3 | 4,847 | 18.3 |
| FINLAND | | | | | | | | | | | | 24 | 2.8 | |
| NORWAY | | | | | | | | | | | | 18 | 2.8 | |
| FRANCE | 381 | | 1,293 | 0.0 | 30 | 0.0 | 47 | 0.0 | 116 | 0.0 | 245 | 0.1 | 245 | 0.1 |
| NETHERLAND | | | | | | | | | | | | 2.5 | 68.8 | |
| LUXEMBURG | | | | | | | | | | | | 4.94 | 61.5 | |
| IRELAND | | | | | | | | | | | | 5.5 | 1,588 | |
| ICELAND | | | | | | | | | | | | 2.2 | 676 | |
| SWEDEN | 2,993 | | 4,246 | 12.2 | 268 | 13.2 | 283 | 4 | 611 | 9.6 | 892 | 1.0 | 892 | 1.0 |
| SWITZERLAND | | | | | | | | | | | | 2.5 | 10,527 | |
| REST. EUROPE | 16,932 | 0 | 32,876 | 3.0 | 5,369 | 1.8 | 5,748 | 29.8 | 7,055 | 2.5 | 10,527 | 11.9 | 10,527 | 11.9 |
| BULGARIA | | | | | | | | | | | | 182 | 78,836 | |
| HUNGARY | | | | | | | | | | | | 43,621 | 833 | |
| POLAND | | | | | | | | | | | | 154 | 15.3 | |
| ROMANIA | | | | | | | | | | | | 277 | 15.3 | |
| U.S.S.R | 440 | | 392 | 10.4 | 32 | 0.3 | 58 | 0.8 | 277 | 3.1 | 164 | 0.9 | 164 | 0.9 |
| YUGOSLAVIA | 2,684 | | 1,683 | 1.7 | 210 | 0.9 | 98 | 1.0 | 46 | 0.8 | 82 | 0.9 | 82 | 0.9 |
| BRAZIL | 3,104 | 0 | 2,075 | 139.2 | 4,396 | 28.1 | 1,636 | 11.7 | 1,790 | 7.6 | 9,092 | 42.9 | 9,092 | 42.9 |
| ARGENTINA | | | | | | | | | | | | 0.9 | 4.8 | |
| PERU | | | | | | | | | | | | 0.9 | 4.8 | |
| VEZUELA | | | | | | | | | | | | 0.3 | 298 | |
| URUGUAI | | | | | | | | | | | | 7.6 | 4.8 | |
| COLOMBIA | | | | | | | | | | | | 0.7 | 4.8 | |
| PANAMA | | | | | | | | | | | | 1,790 | 42.9 | |
| CHILE | | | | | | | | | | | | 0.9 | 1.9 | |
| CUBA | | | | | | | | | | | | 2.2 | 676 | |
| MEXICO | | | | | | | | | | | | 7 | 0.2 | |
| EGYPT | | | | | | | | | | | | 0.0 | 0.0 | |
| ZIMBABWE | | | | | | | | | | | | 21 | 0.2 | |
| TUNISIA | | | | | | | | | | | | 0 | 0.0 | |
| KENIA | | | | | | | | | | | | 0 | 0.0 | |
| SENEGAL | | | | | | | | | | | | 5 | 0.5 | |
| ALGERIA | | | | | | | | | | | | 178 | 2.2 | |
| GABON | | | | | | | | | | | | 31 | 35.0 | |
| TANGANIA | | | | | | | | | | | | 3 | 0.0 | |
| MOZAMBIQUE | | | | | | | | | | | | 0 | 0.0 | |
| LIBIA | | | | | | | | | | | | 0 | 0.0 | |
| CENTAFRICA | | | | | | | | | | | | 0 | 0.0 | |
| SOMALIA | | | | | | | | | | | | 24 | 0.0 | |
| GANA | | | | | | | | | | | | 1 | 0.0 | |
| UGANDA | | | | | | | | | | | | 1 | 0.0 | |
| SUDAN | | | | | | | | | | | | 1 | 0.0 | |
| OTH. AFRIC | | | | | | | | | | | | 2 | 0.0 | |
| OTHERS | 0 | 0 | 114 | 8.5 | 1,298 | 197.2 | 1,254 | 168.3 | 240 | 29 | 3,996 | 109.8 | 3,996 | 109.8 |
| | 8,976 | 0 | 13,869 | 32.5 | 305 | 1.3 | 305 | 0.0 | 3 | 1.0 | 571 | 23.0 | 571 | 23.0 |

(1) FIGURE EQUAIS ZERO OR IS INCLUDED WITH OTHER.
(2) FIGURES RELATING TO 1988 HAVE BEEN REVISED.
SOURCE: IRAN CUSTOMS ADMINISTRATION.



Appendix II-1.8 Containerization in the Persian Gulf

| | IMPORT | | | EXPORT | | | TOTAL | | |
|----------------------|---------------|--------------|-----------------|---------------|--------------|-----------------|-----------|-----------------|-----|
| | LOADED TEU | EMPTY TEU | TONNAGE THOU | LOADED TEU | EMPTY TEU | TONNAGE THOU | TEU | TONNAGE THOU | TEU |
| MINA SULMAN(BAHRAIN) | 39,881 | 2,193 | 950 | 15,281 | 26,899 | 258 | 84,254 | 1,207 | |
| SHUAIBA* (KUWAIT) | 30,303 | 0 | 302 | 989 | 25,821 | 10 | 57,113 | 311 | |
| SHUWAIKH* (KUWAIT) | 4,401 | 4 | 47 | 182 | 3,359 | 2 | 7,946 | 49 | |
| MINA QABOOS (OMAN) | 77,502 | 905 | 754 | 43,851 | 33,346 | 407 | 155,604 | 1,171 | |
| UMMSAID/DOHA (QATAR) | 11,132 | 3,957 | 147 | 6,921 | 7,743 | 207 | 129,753 | 353 | |
| DAMMAN(SAUDI ARABIA) | 166,992 | 0 | 1,767 | 94,395 | 81,225 | 1,299 | 342,612 | 3,067 | |
| PORTZAYED (ABUDHABI) | 21,336 | 0 | 227 | 3,473 | 20,419 | 21 | 45,228 | 248 | |
| JEBEL ALI (DUBAI) | 183,129 | 48,282 | 2,204 | 151,081 | 81,757 | 1,818 | 464,249 | 4,022 | |
| PORTRASHID** (DUBAI) | 262,056 | 46,420 | 6,465 | 183,631 | 121,597 | 4,530 | 613,704 | 10,994 | |
| FUJAIRAH**(FUJAIRAH) | 180,704 | 26,353 | 2,161 | 159,771 | 47,525 | 1,967 | 414,353 | 4,128 | |
| KHOR FAKKAN(SHARJAH) | 129,520 | 8,035 | 1,749 | 98,120 | 33,102 | 1,472 | 268,777 | 3,220 | |
| PORT KHALID(SHARJAH) | 16,202 | 0 | 243 | 6,990 | 4,816 | 109 | 28,008 | 352 | |
| ADEN (YEMEN) | 6,374 | 0 | 91 | 112 | 4,005 | 9 | 10,491 | 100 | |
| TOTAL | 1,129,532 | 136,149 | 17,114 | 764,797 | 491,614 | 12,109 | 2,622,092 | 29,223 | |

*AUG-DEC

**1990

SOURCE: CONTAINERISATION INTERNATIONAL YEAR BOOK, 1993

CONTAINER BERTH TERMINAL

| | BERTHS | DEPTH M | LENGTH M | TOTAL AREA Ha | STORAGE TEU | CFS COVERED AREA Ha |
|----------------------|--------|------------|-------------|---------------------|----------------|---------------------------|
| MINA SULMAN(BAHRAIN) | 2 | 11.0 | 600 | 30.0 | 6,503 | 1.7 |
| SHUAIBA* (KUWAIT) | 4 | 14.0 | 880 | 31.0 | 3,500 | 1.4 GROUNDED |
| SHUWAIKH* (KUWAIT) | 2 | 9.6 | | 27.0 | 12,600 | 2.5 |
| MINA QABOOS (OMAN) | 2 | 9.1 | 366 | 4.7 | 3,200 | 0.5 |
| UMMSAID/DOHA (QATAR) | 4 | 9.1 | 743 | 6.0 | 2,000 | |
| DAMMAN(SAUDI ARABIA) | 4 | 14.0 | 960 | 50.0 | 4,988 | 3.7 GROUNDED |
| PORTZAYED (ABUDHABI) | 4 | 10.5-13 | 920 | 41.0 | 15,000 | 1.3 |
| JEBEL ALI (DUBAI) | 5 | 14.0 | 1,350 | 50.0 | 12,500 | 1.3 |
| PORTRASHID** (DUBAI) | 5 | 13.0 | 1,350 | 50.0 | 30,000 | |
| FUJAIRAH**(FUJAIRAH) | | 12.5 | 780 | 20.0 | 12,000 | 0.3 |
| KHOR FAKKAN(SHARJAH) | 2 | 12.4 | 430 | 15.0 | 11,000 | 0.5 |
| PORT KHALID(SHARJAH) | 3 | 10.5-11.5 | 583 | 12.5 | 5,600 | 5.0 |
| ADEN (YEMEN) | | 5.5 | 244 | 0.9 | | |

Appendix (II)-2 Trade Frame and Cargo Handling Data

Appendix II-2.1 Oil price, products, exports volume

OIL FACTOR COST OF GDP

(CASE-1')

| YEAR | 10THU BAR MPER/DAY | MIL. BAR YEAR | PRICE US \$ | EXPORT MIL. BAR | EXPORT MIL. \$ | FACTORCOST CONSTANT BIL. RLS |
|-----------|-----------------------|------------------|----------------|--------------------|-------------------|------------------------------------|
| 1986 | 218.0 | 795.7 | 13.5 | 456.1 | 6,157.6 | 1,403.0 |
| 1987 | 246.0 | 897.9 | 16.7 | 568.3 | 9,490.0 | 1,598.7 |
| 1988 | 255.7 | 933.3 | 13.9 | 546.2 | 7,592.0 | 1,754.0 |
| 1989 | 294.7 | 1,075.7 | 16.6 | 628.3 | 10,429.5 | 1,889.5 |
| 1990 | 323.1 | 1,179.3 | 21.0 | 775.2 | 16,279.0 | 2,264.7 |
| 1991 | 336.6 | 1,228.6 | 16.3 | 1,000.8 | 16,313.0 | 2,516.7 |
| 1992 | 343.1 | 1,252.3 | 16.6 | 920.9 | 15,300.0 | 2,569.3 |
| 1993 | 353.9 | 1,291.8 | 17.5 | 931.5 | 16,301.6 | 2,560.3 |
| 1994 | 365.1 | 1,332.6 | 18.0 | 942.3 | 16,985.9 | 2,658.0 |
| 1995 | 376.6 | 1,374.6 | 18.6 | 953.1 | 17,698.9 | 2,758.8 |
| 1996 | 388.5 | 1,417.9 | 19.1 | 964.1 | 18,441.8 | 2,862.8 |
| 1997 | 400.7 | 1,462.6 | 19.7 | 975.2 | 19,215.9 | 2,970.0 |
| 1998 | 413.4 | 1,508.8 | 20.3 | 986.5 | 20,022.5 | 3,080.7 |
| 1999 | 426.4 | 1,556.4 | 20.9 | 997.9 | 20,862.9 | 3,194.8 |
| 2000 | 439.8 | 1,605.4 | 21.5 | 1,009.4 | 21,738.7 | 3,312.6 |
| 2001 | 453.7 | 1,656.1 | 22.2 | 1,021.0 | 22,651.2 | 3,434.0 |
| 2002 | 468.0 | 1,708.3 | 22.9 | 1,032.8 | 23,602.0 | 3,559.3 |
| 2003 | 482.8 | 1,762.2 | 22.9 | 1,044.7 | 23,874.1 | 3,688.5 |
| 2004 | 498.0 | 1,817.7 | 22.9 | 1,056.7 | 24,149.5 | 3,821.9 |
| 2005 | 513.7 | 1,875.1 | 22.9 | 1,068.9 | 24,428.0 | 3,959.4 |
| 2006 | 529.9 | 1,934.2 | 22.9 | 1,081.3 | 24,709.7 | 4,101.2 |
| 2007 | 546.6 | 1,995.2 | 22.9 | 1,093.7 | 24,994.6 | 4,247.5 |
| 2008 | 563.9 | 2,058.1 | 22.9 | 1,106.3 | 25,282.9 | 4,398.5 |
| 2009 | 581.7 | 2,123.0 | 22.9 | 1,119.1 | 25,574.4 | 4,554.2 |
| 2010 | 600.0 | 2,190.0 | 22.9 | 1,132.0 | 25,869.3 | 4,714.8 |
| 2002/1994 | 3.2% | 3.2% | 3.0% | 1.2% | 4.2% | 3.7% |
| 2010/2002 | 3.2% | 3.2% | 0.0% | 1.2% | 1.2% | 3.6% |

FORECAST OF THE OIL FACTOR COST OF GDP (CASE-2')

| YEAR | 10THU BAR MPER/DAY | MIL. BAR YEAR | COST US \$ | EXPORT MIL. BAR | EXPORT MIL. \$ | FACTORCOST CONSTANT BIL. RLS |
|-----------|-----------------------|------------------|---------------|--------------------|-------------------|------------------------------------|
| 1986 | 218.0 | 795.7 | 13.5 | 456.1 | 6,157.6 | 1,403.0 |
| 1987 | 246.0 | 897.9 | 16.7 | 568.3 | 9,490.0 | 1,598.7 |
| 1988 | 255.7 | 933.3 | 13.9 | 546.2 | 7,592.0 | 1,754.0 |
| 1989 | 294.7 | 1,075.7 | 16.6 | 628.3 | 10,429.5 | 1,889.5 |
| 1990 | 323.1 | 1,179.3 | 21.0 | 775.2 | 16,279.0 | 2,264.7 |
| 1991 | 336.6 | 1,228.6 | 16.3 | 1,000.8 | 16,313.0 | 2,516.7 |
| 1992 | 343.1 | 1,252.3 | 16.6 | 920.9 | 15,300.0 | 2,569.3 |
| 1993 | 352.6 | 1,286.9 | 16.9 | 931.5 | 15,786.0 | 2,548.4 |
| 1994 | 362.3 | 1,322.4 | 17.3 | 942.3 | 16,287.4 | 2,633.6 |
| 1995 | 372.3 | 1,358.9 | 17.6 | 953.1 | 16,804.7 | 2,721.1 |
| 1996 | 382.6 | 1,396.4 | 18.0 | 964.1 | 17,338.5 | 2,811.0 |
| 1997 | 393.1 | 1,434.9 | 18.3 | 975.2 | 17,889.2 | 2,903.4 |
| 1998 | 404.0 | 1,474.5 | 18.7 | 986.5 | 18,457.4 | 2,998.4 |
| 1999 | 415.1 | 1,515.2 | 19.1 | 997.9 | 19,043.7 | 3,096.0 |
| 2000 | 426.6 | 1,557.0 | 19.5 | 1,009.4 | 19,648.5 | 3,196.3 |
| 2001 | 438.3 | 1,599.9 | 19.9 | 1,021.0 | 20,272.6 | 3,299.3 |
| 2002 | 450.4 | 1,644.1 | 20.3 | 1,032.8 | 20,916.5 | 3,405.2 |
| 2003 | 462.9 | 1,689.4 | 20.3 | 1,044.7 | 21,157.7 | 3,514.0 |
| 2004 | 475.6 | 1,736.0 | 20.3 | 1,056.7 | 21,401.7 | 3,625.8 |
| 2005 | 488.7 | 1,783.9 | 20.3 | 1,068.9 | 21,648.5 | 3,740.7 |
| 2006 | 502.2 | 1,833.2 | 20.3 | 1,081.3 | 21,898.2 | 3,858.8 |
| 2007 | 516.1 | 1,883.7 | 20.3 | 1,093.7 | 22,150.7 | 3,980.1 |
| 2008 | 530.3 | 1,935.7 | 20.3 | 1,106.3 | 22,406.2 | 4,104.8 |
| 2009 | 545.0 | 1,989.1 | 20.3 | 1,119.1 | 22,664.6 | 4,232.9 |
| 2010 | 560.0 | 2,044.0 | 20.3 | 1,132.0 | 22,925.9 | 4,364.6 |
| 2002/1994 | 2.8% | 2.8% | 2.0% | 1.2% | 3.2% | 3.3% |
| 2010/2002 | 2.8% | 2.8% | 0.0% | 1.2% | 1.2% | 3.2% |

FORECAST OF THE OIL FACTOR COST OF GDP (CASE-3)

| YEAR | 10THU BAR MPER/DAY | MIL. BAR YEAR | COST US \$ | EXPORT MIL. BAR | EXPORT MIL. \$ | FACTORCOST CONSTANT BIL. RLS |
|-----------|-----------------------|------------------|---------------|--------------------|-------------------|------------------------------------|
| 1986 | 218.0 | 795.7 | 13.5 | 456.1 | 6,157.6 | 1,403.0 |
| 1987 | 246.0 | 897.9 | 16.7 | 568.3 | 9,490.0 | 1,598.7 |
| 1988 | 255.7 | 933.3 | 13.9 | 546.2 | 7,592.0 | 1,754.0 |
| 1989 | 294.7 | 1,075.7 | 16.6 | 628.3 | 10,429.5 | 1,889.5 |
| 1990 | 323.1 | 1,179.3 | 21.0 | 775.2 | 16,279.0 | 2,264.7 |
| 1991 | 336.6 | 1,228.6 | 16.3 | 1,000.8 | 16,313.0 | 2,516.7 |
| 1992 | 343.1 | 1,252.3 | 16.6 | 920.9 | 15,300.0 | 2,569.3 |
| 1993 | 350.0 | 1,277.4 | 16.8 | 926.2 | 15,542.7 | 2,525.6 |
| 1994 | 357.0 | 1,302.9 | 16.9 | 931.6 | 15,789.2 | 2,586.9 |
| 1995 | 364.1 | 1,329.0 | 17.1 | 937.0 | 16,039.7 | 2,649.3 |
| 1996 | 371.4 | 1,355.5 | 17.3 | 942.5 | 16,294.1 | 2,713.1 |
| 1997 | 378.8 | 1,382.6 | 17.5 | 947.9 | 16,552.5 | 2,778.1 |
| 1998 | 386.4 | 1,410.3 | 17.6 | 953.4 | 16,815.1 | 2,844.4 |
| 1999 | 394.1 | 1,438.5 | 17.8 | 959.0 | 17,081.8 | 2,912.1 |
| 2000 | 402.0 | 1,467.2 | 18.0 | 964.5 | 17,352.8 | 2,981.1 |
| 2001 | 410.0 | 1,496.6 | 18.2 | 970.1 | 17,628.0 | 3,051.5 |
| 2002 | 418.2 | 1,526.5 | 18.4 | 975.8 | 17,907.6 | 3,123.2 |
| 2003 | 426.6 | 1,557.0 | 18.5 | 981.4 | 18,191.7 | 3,196.5 |
| 2004 | 435.1 | 1,588.2 | 18.7 | 987.1 | 18,480.2 | 3,271.2 |
| 2005 | 443.8 | 1,619.9 | 18.9 | 992.9 | 18,773.3 | 3,347.3 |
| 2006 | 452.7 | 1,652.3 | 19.1 | 998.6 | 19,071.1 | 3,425.0 |
| 2007 | 461.7 | 1,685.4 | 19.3 | 1,004.4 | 19,373.6 | 3,504.3 |
| 2008 | 471.0 | 1,719.1 | 19.5 | 1,010.2 | 19,680.9 | 3,585.1 |
| 2009 | 480.4 | 1,753.4 | 19.7 | 1,016.1 | 19,993.1 | 3,667.6 |
| 2010 | 490.0 | 1,788.5 | 19.9 | 1,022.0 | 20,310.2 | 3,751.7 |
| 2000/1994 | 2.0% | 2.0% | 1.0% | 0.6% | 1.6% | 2.4% |
| 2010/2000 | 2.0% | 2.0% | 1.0% | 0.6% | 1.6% | 2.3% |

FORECAST OF THE OIL FACTOR COST OF GDP (CASE-4)

| YEAR | 10THU BAR MPER/DAY | MIL. BAR YEAR | COST US \$ | EXPORT MIL. BAR | EXPORT MIL. \$ | FACTORCOST CONSTANT BIL. RLS |
|------|-----------------------|------------------|---------------|--------------------|-------------------|------------------------------------|
| 1986 | 218.0 | 795.7 | 13.5 | 456.1 | 6,157.6 | 1,403.0 |
| 1987 | 246.0 | 897.9 | 16.7 | 568.3 | 9,490.0 | 1,598.7 |
| 1988 | 255.7 | 933.3 | 13.9 | 546.2 | 7,592.0 | 1,754.0 |
| 1989 | 294.7 | 1,075.7 | 16.6 | 628.3 | 10,429.5 | 1,889.5 |
| 1990 | 323.1 | 1,179.3 | 21.0 | 775.2 | 16,279.0 | 2,264.7 |
| 1991 | 336.6 | 1,228.6 | 16.3 | 1,000.8 | 16,313.0 | 2,516.7 |
| 1992 | 343.1 | 1,252.3 | 16.6 | 920.9 | 15,300.0 | 2,569.3 |
| 1993 | 347.0 | 1,266.5 | 16.8 | 920.5 | 15,445.6 | 2,484.8 |
| 1994 | 350.9 | 1,280.8 | 16.9 | 920.0 | 15,592.6 | 2,518.5 |
| 1995 | 354.9 | 1,295.2 | 17.1 | 919.6 | 15,741.0 | 2,552.6 |
| 1996 | 358.9 | 1,309.9 | 17.3 | 919.1 | 15,890.8 | 2,587.1 |
| 1997 | 362.9 | 1,324.7 | 17.5 | 918.7 | 16,042.0 | 2,622.0 |
| 1998 | 367.0 | 1,339.6 | 17.6 | 918.3 | 16,194.7 | 2,657.3 |
| 1999 | 371.2 | 1,354.8 | 17.8 | 917.8 | 16,348.8 | 2,693.0 |
| 2000 | 375.4 | 1,370.1 | 18.0 | 917.4 | 16,504.4 | 2,729.1 |
| 2001 | 379.6 | 1,385.6 | 18.2 | 916.9 | 16,661.5 | 2,765.6 |
| 2002 | 383.9 | 1,401.2 | 18.4 | 916.5 | 16,820.0 | 2,802.5 |
| 2003 | 388.2 | 1,417.1 | 18.5 | 916.1 | 16,980.1 | 2,839.9 |
| 2004 | 392.6 | 1,433.1 | 18.7 | 915.6 | 17,141.7 | 2,877.6 |
| 2005 | 397.1 | 1,449.3 | 18.9 | 915.2 | 17,304.8 | 2,915.8 |
| 2006 | 401.5 | 1,465.6 | 19.1 | 914.7 | 17,469.5 | 2,954.4 |
| 2007 | 406.1 | 1,482.2 | 19.3 | 914.3 | 17,635.8 | 2,993.5 |
| 2008 | 410.7 | 1,498.9 | 19.5 | 913.9 | 17,803.6 | 3,033.0 |
| 2009 | 415.3 | 1,515.9 | 19.7 | 913.4 | 17,973.0 | 3,072.9 |
| 2010 | 420.0 | 1,533.0 | 19.9 | 913.0 | 18,144.1 | 3,113.3 |
| | 1.1% | 1.1% | 1.0% | 0.0% | 1.0% | 1.3% |
| | 1.1% | 1.1% | 1.0% | 0.0% | 1.0% | 1.3% |

Appendix II-2.2 National products, constant prices of 1982

Table CASE-1 NATIONAL PRODUCT, CONSTANT PRICES OF 1982 (BN. RIs)

| YEAR | GROSS DOMESTIC PRODUCT | | | | | | |
|----------------------|------------------------|---------|--------|---------------|---------|--------------|----------|
| | AGRI-CULTURE | OIL | MINING | MANUFACTURING | ENERGY | CONSTRUCTION | SERVICES |
| 1986/87 | 2,650.5 | 1,403.0 | 62.3 | 1,148.0 | 173.5 | 648.9 | 4,606.3 |
| 1987/88 | 2,715.8 | 1,598.7 | 65.5 | 1,275.6 | 193.2 | 549.8 | 4,377.6 |
| 1988/89 | 2,648.0 | 1,754.0 | 56.6 | 1,301.8 | 186.3 | 433.4 | 3,980.5 |
| 1989/90 | 2,746.0 | 1,889.5 | 58.6 | 1,417.9 | 206.7 | 425.9 | 4,055.3 |
| 1990/91 | 2,967.5 | 2,264.7 | 63.1 | 1,643.8 | 246.7 | 438.2 | 4,421.2 |
| 1991/92 | 3,120.2 | 2,516.7 | 68.4 | 1,940.3 | 285.0 | 508.3 | 4,825.2 |
| 1992/93 | 3,351.6 | 2,569.3 | 72.9 | 2,002.4 | 309.1 | 548.5 | 5,341.9 |
| 1993/94* | 3,514.7 | 2,718.1 | 83.8 | 2,332.9 | 333.4 | 583.2 | 5,516.2 |
| 1994/95 | 3,717.3 | 2,814.9 | 92.4 | 2,549.1 | 359.4 | 622.5 | 5,877.5 |
| 1995/96 | 3,931.6 | 2,915.2 | 101.9 | 2,785.4 | 387.4 | 664.5 | 6,262.5 |
| 1996/97 | 4,158.2 | 3,019.1 | 112.3 | 3,043.6 | 417.6 | 709.2 | 6,672.6 |
| 1997/98 | 4,398.0 | 3,126.7 | 123.9 | 3,325.7 | 450.1 | 757.0 | 7,109.6 |
| 1998/99 | 4,651.5 | 3,238.1 | 136.6 | 3,634.0 | 485.1 | 808.1 | 7,575.3 |
| 1999/00 | 4,903.5 | 3,342.4 | 150.2 | 3,957.8 | 521.2 | 859.7 | 8,044.9 |
| 2000/01 | 5,169.1 | 3,450.1 | 165.0 | 4,310.5 | 559.9 | 914.6 | 8,543.6 |
| 2001/02 | 5,449.1 | 3,561.3 | 181.4 | 4,694.6 | 601.6 | 973.1 | 9,073.3 |
| 2002/03 | 5,744.3 | 3,676.1 | 199.4 | 5,112.9 | 646.3 | 1,035.3 | 9,635.7 |
| 2003/04 | 6,055.4 | 3,794.5 | 219.2 | 5,568.5 | 694.3 | 1,101.4 | 10,233.1 |
| 2004/05 | 6,383.5 | 3,916.8 | 240.9 | 6,064.7 | 745.9 | 1,171.8 | 10,867.5 |
| 2005/06 | 6,729.3 | 4,043.1 | 264.8 | 6,605.0 | 801.4 | 1,246.7 | 11,541.2 |
| 2006/07 | 7,093.8 | 4,173.3 | 291.0 | 7,193.6 | 861.0 | 1,326.3 | 12,256.6 |
| 2007/08 | 7,478.1 | 4,307.8 | 319.9 | 7,834.6 | 925.0 | 1,411.1 | 13,016.4 |
| 2008/09 | 7,883.1 | 4,446.7 | 351.6 | 8,532.7 | 993.7 | 1,501.2 | 13,823.4 |
| 2009/10 | 8,310.2 | 4,589.9 | 386.5 | 9,293.0 | 1,067.6 | 1,597.2 | 14,680.3 |
| 2010/11 | 8,760.3 | 4,737.9 | 424.8 | 10,121.0 | 1,147.0 | 1,699.2 | 15,590.4 |
| 2000/1994 | 5.6% | 3.4% | 10.2% | 9.1% | 7.7% | 6.6% | 6.4% |
| 2010/2000 | 5.4% | 3.2% | 9.9% | 8.9% | 7.4% | 6.4% | 6.2% |
| SHARE OF GDP in 2010 | 20.6% | 11.2% | 1.0% | 23.8% | 2.7% | 4.0% | 36.7% |

Table CASE-2 NATIONAL PRODUCT, CONSTANT PRICES OF 1982 (RLS BN)

| YEAR | GROSS DOMESTIC PRODUCT | | | | | | |
|----------------------|------------------------|---------|--------|---------------|--------|--------------|----------|
| | AGRI-CULTURE | OIL | MINING | MANUFACTURING | ENERGY | CONSTRUCTION | SERVICES |
| 1986/87 | 2,650.5 | 1,403.0 | 62.3 | 1,148.0 | 173.5 | 648.9 | 4,606.3 |
| 1987/88 | 2,715.8 | 1,598.7 | 65.5 | 1,275.6 | 193.2 | 549.8 | 4,377.6 |
| 1988/89 | 2,648.0 | 1,754.0 | 56.6 | 1,301.8 | 186.3 | 433.4 | 3,980.5 |
| 1989/90 | 2,746.0 | 1,889.5 | 58.6 | 1,417.9 | 206.7 | 425.9 | 4,055.3 |
| 1990/91 | 2,967.5 | 2,264.7 | 63.1 | 1,643.8 | 246.7 | 438.2 | 4,421.2 |
| 1991/92 | 3,120.2 | 2,516.7 | 68.4 | 1,940.3 | 285.0 | 508.3 | 4,825.2 |
| 1992/93 | 3,351.6 | 2,569.3 | 72.9 | 2,002.4 | 309.1 | 548.5 | 5,341.9 |
| 1993/94* | 3,513.5 | 2,708.2 | 82.9 | 2,278.1 | 330.0 | 577.1 | 5,458.9 |
| 1994/95 | 3,703.6 | 2,790.8 | 90.6 | 2,452.2 | 352.7 | 610.9 | 5,767.8 |
| 1995/96 | 3,904.1 | 2,875.9 | 99.1 | 2,639.5 | 377.0 | 646.6 | 6,094.2 |
| 1996/97 | 4,115.4 | 2,963.6 | 108.4 | 2,841.1 | 402.9 | 684.4 | 6,439.1 |
| 1997/98 | 4,338.1 | 3,053.9 | 118.5 | 3,058.2 | 430.7 | 724.4 | 6,803.4 |
| 1998/99 | 4,572.9 | 3,147.0 | 129.6 | 3,291.8 | 460.4 | 766.8 | 7,188.4 |
| 1999/00 | 4,804.4 | 3,232.2 | 141.3 | 3,531.5 | 490.4 | 809.0 | 7,570.1 |
| 2000/01 | 5,047.6 | 3,319.7 | 154.0 | 3,788.7 | 522.5 | 853.4 | 7,972.0 |
| 2001/02 | 5,303.2 | 3,409.5 | 167.9 | 4,064.6 | 556.6 | 900.4 | 8,395.2 |
| 2002/03 | 5,571.6 | 3,501.8 | 183.0 | 4,360.6 | 593.0 | 949.9 | 8,840.9 |
| 2003/04 | 5,853.7 | 3,596.6 | 199.4 | 4,678.1 | 631.7 | 1,002.1 | 9,310.2 |
| 2004/05 | 6,150.1 | 3,694.0 | 217.3 | 5,018.8 | 673.0 | 1,057.2 | 9,804.5 |
| 2005/06 | 6,461.4 | 3,794.0 | 236.9 | 5,384.3 | 717.0 | 1,115.3 | 10,325.0 |
| 2006/07 | 6,788.6 | 3,896.7 | 258.2 | 5,776.4 | 763.8 | 1,176.6 | 10,873.1 |
| 2007/08 | 7,132.3 | 4,002.2 | 281.4 | 6,197.0 | 813.7 | 1,241.3 | 11,450.4 |
| 2008/09 | 7,493.3 | 4,110.5 | 306.7 | 6,648.3 | 866.8 | 1,309.5 | 12,058.2 |
| 2009/10 | 7,872.7 | 4,221.8 | 334.3 | 7,132.5 | 923.5 | 1,381.5 | 12,698.4 |
| 2010/11 | 8,271.3 | 4,336.1 | 364.4 | 7,651.9 | 983.8 | 1,457.5 | 13,372.5 |
| 2000/1994 | 5.3% | 2.9% | 9.2% | 7.5% | 6.8% | 5.7% | 5.5% |
| 2010/2000 | 5.1% | 2.7% | 9.0% | 7.3% | 6.5% | 5.5% | 5.3% |
| SHARE OF GDP in 2010 | 22.7% | 11.9% | 1.0% | 21.0% | 2.7% | 4.0% | 36.7% |

SOURCE: CENTRAL BANK OF I.R.I

*ESTIMATED BY THE STUDY TEAM FOR A PERIOD OF 1993-2010

Table CASE-3 NATIONAL PRODUCT, CONSTANT PRICES OF 1982 (RLS BN)

| YEAR | GROSS DOMESTIC PRODUCT | | | | | | |
|----------------------|------------------------|---------|--------|---------------|--------|--------------|----------|
| | AGRI-CULTURE | OIL | MINING | MANUFACTURING | ENERGY | CONSTRUCTION | SERVICES |
| 1986/87 | 2,650.5 | 1,403.0 | 62.3 | 1,148.0 | 173.5 | 648.9 | 4,606.3 |
| 1987/88 | 2,715.8 | 1,598.7 | 65.5 | 1,275.6 | 193.2 | 549.8 | 4,377.6 |
| 1988/89 | 2,648.0 | 1,754.0 | 56.6 | 1,301.8 | 186.3 | 433.4 | 3,980.5 |
| 1989/90 | 2,746.0 | 1,889.5 | 58.6 | 1,417.9 | 206.7 | 425.9 | 4,055.3 |
| 1990/91 | 2,967.5 | 2,264.7 | 63.1 | 1,643.8 | 246.7 | 438.2 | 4,421.2 |
| 1991/92 | 3,120.2 | 2,516.7 | 68.4 | 1,940.3 | 285.0 | 508.3 | 4,825.2 |
| 1992/93 | 3,351.6 | 2,569.3 | 72.9 | 2,002.4 | 309.1 | 548.5 | 5,341.9 |
| 1993/94* | 3,484.2 | 2,691.2 | 82.0 | 2,230.4 | 326.5 | 571.0 | 5,416.3 |
| 1994/95 | 3,638.0 | 2,749.7 | 88.7 | 2,362.8 | 345.3 | 598.0 | 5,670.1 |
| 1995/96 | 3,798.6 | 2,809.6 | 96.0 | 2,503.1 | 365.1 | 626.2 | 5,935.8 |
| 1996/97 | 3,966.2 | 2,870.8 | 103.9 | 2,651.7 | 386.1 | 655.8 | 6,214.0 |
| 1997/98 | 4,141.3 | 2,933.2 | 112.4 | 2,809.2 | 408.3 | 686.8 | 6,505.2 |
| 1998/99 | 4,324.1 | 2,997.1 | 121.6 | 2,976.0 | 431.8 | 719.3 | 6,810.1 |
| 1999/00 | 4,499.8 | 3,052.1 | 131.1 | 3,142.2 | 455.2 | 750.8 | 7,105.4 |
| 2000/01 | 4,682.7 | 3,108.1 | 141.4 | 3,317.6 | 479.7 | 783.6 | 7,413.5 |
| 2001/02 | 4,873.0 | 3,165.1 | 152.5 | 3,502.8 | 505.6 | 817.9 | 7,734.9 |
| 2002/03 | 5,071.0 | 3,223.1 | 164.4 | 3,698.4 | 532.9 | 853.7 | 8,070.3 |
| 2003/04 | 5,277.1 | 3,282.3 | 177.3 | 3,904.9 | 561.7 | 891.0 | 8,420.2 |
| 2004/05 | 5,491.6 | 3,342.5 | 191.2 | 4,122.9 | 592.0 | 930.0 | 8,795.3 |
| 2005/06 | 5,714.8 | 3,403.8 | 206.2 | 4,353.1 | 624.0 | 970.7 | 9,166.2 |
| 2006/07 | 5,947.0 | 3,466.2 | 222.3 | 4,596.1 | 657.7 | 1,013.2 | 9,563.6 |
| 2007/08 | 6,188.7 | 3,529.8 | 239.7 | 4,852.7 | 693.2 | 1,057.5 | 9,978.3 |
| 2008/09 | 6,440.2 | 3,594.6 | 258.5 | 5,123.7 | 730.6 | 1,103.8 | 10,410.9 |
| 2009/10 | 6,702.0 | 3,660.5 | 278.8 | 5,409.7 | 770.1 | 1,152.1 | 10,862.4 |
| 2010/11 | 6,974.4 | 3,727.7 | 300.6 | 5,711.8 | 811.7 | 1,202.5 | 11,333.3 |
| 2000/1994 | 4.3% | 2.1% | 8.1% | 5.8% | 5.6% | 4.6% | 4.6% |
| 2010/2000 | 4.1% | 1.8% | 7.8% | 5.6% | 5.4% | 4.4% | 4.3% |
| SHARE OF GDP in 2010 | 23.2% | 12.4% | 1.0% | 19.0% | 2.7% | 4.0% | 37.7% |

Table CASE-4 NATIONAL PRODUCT, CONSTANT PRICES OF 1982 (RLS BN)

| YEAR | GROSS DOMESTIC PRODUCT | | | | | | |
|----------------------|------------------------|---------|--------|---------------|--------|--------------|----------|
| | AGRI-CULTURE | OIL | MINING | MANUFACTURING | ENERGY | CONSTRUCTION | SERVICES |
| 1986/87 | 2,650.5 | 1,403.0 | 62.3 | 1,148.0 | 173.5 | 648.9 | 4,606.3 |
| 1987/88 | 2,715.8 | 1,598.7 | 65.5 | 1,275.6 | 193.2 | 549.8 | 4,377.6 |
| 1988/89 | 2,648.0 | 1,754.0 | 56.6 | 1,301.8 | 186.3 | 433.4 | 3,980.5 |
| 1989/90 | 2,746.0 | 1,889.5 | 58.6 | 1,417.9 | 206.7 | 425.9 | 4,055.3 |
| 1990/91 | 2,967.5 | 2,264.7 | 63.1 | 1,643.8 | 246.7 | 438.2 | 4,421.2 |
| 1991/92 | 3,120.2 | 2,516.7 | 68.4 | 1,940.3 | 285.0 | 508.3 | 4,825.2 |
| 1992/93 | 3,351.6 | 2,569.3 | 72.9 | 2,002.4 | 309.1 | 548.5 | 5,341.9 |
| 1993/94* | 3,393.5 | 2,689.1 | 77.7 | 2,170.8 | 317.2 | 549.8 | 5,316.6 |
| 1994/95 | 3,460.7 | 2,718.2 | 81.0 | 2,245.3 | 327.2 | 559.1 | 5,457.2 |
| 1995/96 | 3,529.2 | 2,747.6 | 84.5 | 2,322.4 | 337.5 | 568.6 | 5,601.6 |
| 1996/97 | 3,599.1 | 2,777.4 | 88.1 | 2,402.1 | 348.2 | 578.2 | 5,749.8 |
| 1997/98 | 3,670.3 | 2,807.4 | 91.8 | 2,484.6 | 359.2 | 588.1 | 5,902.0 |
| 1998/99 | 3,743.0 | 2,837.8 | 95.7 | 2,569.9 | 370.5 | 598.0 | 6,058.1 |
| 1999/00 | 3,804.4 | 2,859.0 | 99.5 | 2,649.3 | 381.0 | 606.2 | 6,197.8 |
| 2000/01 | 3,866.9 | 2,880.3 | 103.4 | 2,731.1 | 391.7 | 614.4 | 6,340.6 |
| 2001/02 | 3,930.3 | 2,901.8 | 107.4 | 2,815.5 | 402.7 | 622.8 | 6,486.7 |
| 2002/03 | 3,994.8 | 2,923.4 | 111.6 | 2,902.5 | 414.1 | 631.2 | 6,636.3 |
| 2003/04 | 4,060.4 | 2,945.3 | 115.9 | 2,992.2 | 425.7 | 639.8 | 6,789.2 |
| 2004/05 | 4,127.0 | 2,967.2 | 120.5 | 3,084.6 | 437.7 | 648.5 | 6,945.7 |
| 2005/06 | 4,194.8 | 2,989.4 | 125.2 | 3,179.9 | 450.1 | 657.3 | 7,105.8 |
| 2006/07 | 4,263.6 | 3,011.7 | 130.1 | 3,278.1 | 462.7 | 666.3 | 7,269.6 |
| 2007/08 | 4,333.6 | 3,034.2 | 135.2 | 3,379.4 | 475.8 | 675.3 | 7,437.1 |
| 2008/09 | 4,404.7 | 3,056.8 | 140.4 | 3,483.8 | 489.2 | 684.5 | 7,608.5 |
| 2009/10 | 4,477.0 | 3,079.6 | 145.9 | 3,591.5 | 502.9 | 693.8 | 7,783.9 |
| 2010/11 | 4,550.4 | 3,102.6 | 151.6 | 3,702.4 | 517.1 | 703.3 | 7,963.3 |
| 2000/1994 | 1.9% | 1.0% | 4.1% | 3.3% | 3.0% | 1.6% | 2.5% |
| 2010/2000 | 1.6% | 0.7% | 3.9% | 3.1% | 2.8% | 1.4% | 2.3% |
| SHARE OF GDP in 2010 | 22.0% | 15.0% | 0.7% | 17.9% | 2.5% | 3.4% | 38.5% |

SOURCE: CENTRAL BANK OF I. R. I

*ESTIMATED BY THE STUDY TEAM FOR A PERIOD OF 1993-2010

Appendix II-2.3 Future trade frame

FUTURE TRADE FORECAST (VALUE MILLION DOLLARS)

| YEAR | EXPORT | | EXPORT TOTAL | IMPORT TOTAL | *TRADE VALUE |
|---|-----------|----------|-----------------|-----------------|-----------------|
| | CRUDE OIL | NON-OIL | | | |
| 1987-88 | 10,755.9 | 1,161.0 | 11,916.0 | 13,236.0 | 14,397 |
| 1988-89 | 9,673.1 | 1,036.0 | 10,709.1 | 11,519.0 | 12,555 |
| 1989-90 | 12,037.0 | 1,044.0 | 13,081.0 | 14,666.0 | 15,710 |
| 1990-91 | 17,441.0 | 1,327.0 | 18,768.0 | 20,526.0 | 21,853 |
| 1991-92 | 15,802.0 | 2,613.0 | 18,415.0 | 27,445.0 | 30,058 |
| 1992-93 | 15,300.0 | 2,800.0 | 18,100.0 | 23,200.0 | 26,000 |
| 1993-94 | 16,305.4 | 3,280.2 | 19,585.6 | 24,759.0 | 28,039 |
| 1994-95 | 16,989.8 | 4,004.8 | 20,994.6 | 23,521.1 | 27,526 |
| 1995-96 | 17,703.0 | 4,802.0 | 22,505.0 | 24,979.4 | 29,781 |
| 1996-97 | 18,446.1 | 5,677.9 | 24,124.0 | 26,528.1 | 32,206 |
| 1997-98 | 19,220.4 | 6,639.2 | 25,859.5 | 28,172.9 | 34,812 |
| 1998-99 | 20,027.2 | 7,692.7 | 27,719.9 | 29,919.6 | 37,612 |
| 1999-00 | 20,867.8 | 8,846.3 | 29,714.1 | 31,266.0 | 40,112 |
| 2000-01 | 21,743.7 | 10,108.0 | 31,851.8 | 32,672.9 | 42,781 |
| 2001-02 | 22,656.4 | 11,486.8 | 34,143.2 | 34,143.2 | 45,630 |
| 2002-03 | 23,607.5 | 14,359.9 | 37,967.4 | 35,679.7 | 50,040 |
| 2003-04 | 23,879.7 | 15,693.2 | 39,572.9 | 37,285.2 | 52,978 |
| 2004-05 | 24,155.1 | 17,095.7 | 41,250.8 | 38,963.1 | 56,059 |
| 2005-06 | 24,433.7 | 18,570.5 | 43,004.1 | 40,716.4 | 59,287 |
| 2006-07 | 24,715.4 | 20,120.9 | 44,836.4 | 42,548.7 | 62,670 |
| 2007-08 | 25,000.4 | 21,750.6 | 46,751.0 | 44,463.3 | 66,214 |
| 2008-09 | 25,288.8 | 23,463.1 | 48,751.9 | 46,464.2 | 69,927 |
| 2009-10 | 25,580.4 | 25,262.4 | 50,842.8 | 48,555.1 | 73,817 |
| 2010-11 | 25,875.4 | 27,152.4 | 53,027.8 | 50,740.1 | 77,892 |
| 2010/2000 | 1.8% | 10.4% | 5.5% | 4.5% | 6.2% |
| NON-OIL / TOTAL EXP. = 51.2% | | | | | |
| * TRADE VALUE (EXCLUDING OIL, OIL PRODUCTS) | | | | | |

CARGO VOLUME (1,000 TONS)

| EXPORT VOLUME | IMPORT VOLUME | TOTAL VOLUME |
|------------------|------------------|-----------------|
| 1.132 | 15.348 | 16.480 |
| 1.224 | 13.376 | 14.600 |
| 1.455 | 19.240 | 20.695 |
| 1.242 | 20.540 | 21.782 |
| 2.831 | 21.500 | 24.331 |
| 3.438 | 21.113 | 24.551 |
| 3.279 | 19.737 | 23.016 |
| 4.821 | 25.481 | 30.302 |
| 5.780 | 27.061 | 32.841 |
| 6.335 | 28.739 | 35.573 |
| 7.992 | 30.521 | 38.512 |
| 9.260 | 32.413 | 41.673 |
| 10.648 | 33.871 | 44.520 |
| 12.167 | 35.396 | 47.563 |
| 13.312 | 37.450 | 50.763 |
| 14.565 | 39.624 | 54.189 |
| 15.936 | 41.924 | 57.860 |
| 17.436 | 44.357 | 61.794 |
| 19.078 | 46.932 | 66.010 |
| 20.874 | 49.656 | 70.530 |
| 22.838 | 52.538 | 75.377 |
| 24.988 | 55.588 | 80.576 |
| 27.340 | 58.815 | 86.155 |
| 29.914 | 62.228 | 92.142 |
| 9.4% | 5.8% | 6.8% |
| 32.5% | 67.5% | |

EXCLUDING OIL, OIL PRODUCTS

FUTURE TRADE FRAME (VALUE MILLION DOLLARS)

| YEAR | EXPORT | | EXPORT TOTAL | IMPORT TOTAL | *TRADE VALUE |
|--|-----------|----------|-----------------|-----------------|-----------------|
| | CRUDE OIL | NON-OIL | | | |
| 1987-88 | 10,755.0 | 1,161.2 | 11,916.2 | 13,236.0 | 14,397 |
| 1988-89 | 9,673.1 | 1,036.4 | 10,709.5 | 11,519.0 | 12,555 |
| 1989-90 | 12,037.0 | 1,064.0 | 13,101.0 | 14,666.0 | 15,730 |
| 1990-91 | 17,441.0 | 1,327.0 | 18,768.0 | 20,526.0 | 21,853 |
| 1991-92 | 15,802.0 | 2,613.0 | 18,415.0 | 27,445.0 | 30,058 |
| 1992-93 | 15,300.0 | 2,800.0 | 18,100.0 | 23,200.0 | 26,000 |
| 1993-94 | 16,305.0 | 3,280.0 | 19,585.0 | 24,759.0 | 28,039 |
| 1994-95 | 16,822.9 | 3,920.2 | 20,743.1 | 23,521.0 | 27,441 |
| 1995-96 | 17,357.2 | 4,612.4 | 21,969.6 | 24,508.9 | 29,121 |
| 1996-97 | 17,908.5 | 5,360.2 | 23,268.7 | 25,538.3 | 30,898 |
| 1997-98 | 18,477.4 | 6,167.2 | 24,644.6 | 26,610.9 | 32,778 |
| 1998-99 | 19,064.3 | 7,037.6 | 26,101.8 | 27,728.6 | 34,766 |
| 1999-00 | 19,669.8 | 7,975.5 | 27,645.3 | 28,782.3 | 36,758 |
| 2000-01 | 20,294.6 | 8,985.4 | 29,279.9 | 29,876.0 | 38,861 |
| 2001-02 | 20,939.2 | 10,072.1 | 31,011.3 | 31,011.3 | 41,083 |
| 2002-03 | 21,604.3 | 12,652.6 | 34,256.8 | 32,189.7 | 44,842 |
| 2003-04 | 21,853.4 | 13,626.6 | 35,480.0 | 33,412.9 | 47,040 |
| 2004-05 | 22,105.4 | 14,644.3 | 36,749.7 | 34,682.6 | 49,327 |
| 2005-06 | 22,360.3 | 15,707.3 | 38,067.7 | 36,000.5 | 51,708 |
| 2006-07 | 22,618.2 | 16,817.5 | 39,435.7 | 37,368.6 | 54,186 |
| 2007-08 | 22,879.0 | 17,976.7 | 40,855.7 | 38,788.6 | 56,765 |
| 2008-09 | 23,142.9 | 19,186.8 | 42,329.6 | 40,262.5 | 59,449 |
| 2009-10 | 23,409.8 | 20,449.9 | 43,859.6 | 41,792.5 | 62,242 |
| 2010-11 | 23,679.7 | 21,768.0 | 45,447.7 | 43,380.6 | 65,149 |
| 2010/2000 | 1.6% | 9.3% | 4.5% | 3.8% | 5.3% |
| NON-OIL / TOTAL EXP. = 47.9% | | | | | |
| * TRADE VALUE (EXCLUDING OIL, OIL PRODUCT) | | | | | |

CARGO VOLUME (1,000 TONS)

| EXPORT VOLUME | IMPORT VOLUME | TOTAL VOLUME |
|------------------|------------------|-----------------|
| 1.132 | 15.348 | 16.480 |
| 1.224 | 13.376 | 14.600 |
| 1.455 | 19.240 | 20.695 |
| 1.242 | 20.540 | 21.782 |
| 2.831 | 21.500 | 24.331 |
| 3.438 | 21.113 | 24.551 |
| 3.279 | 19.737 | 23.016 |
| 4.719 | 25.481 | 30.200 |
| 5.552 | 26.551 | 32.103 |
| 6.452 | 27.667 | 34.119 |
| 7.424 | 28.828 | 36.252 |
| 8.471 | 30.039 | 38.510 |
| 9.600 | 31.181 | 40.781 |
| 10.816 | 32.366 | 43.181 |
| 11.712 | 34.015 | 45.727 |
| 12.683 | 35.748 | 48.431 |
| 13.734 | 37.570 | 51.304 |
| 14.873 | 39.484 | 54.357 |
| 16.105 | 41.496 | 57.602 |
| 17.440 | 43.611 | 61.051 |
| 18.886 | 45.833 | 64.719 |
| 20.451 | 48.169 | 68.620 |
| 22.146 | 50.623 | 72.769 |
| 23.982 | 53.203 | 77.184 |
| 8.3% | 5.1% | 6.0% |
| 31.1% | 68.9% | |

EXCLUDING OIL, OIL PRODUCTS

FUTURE TRADE FRAME (VALUE MILLION DOLLARS)
(CASE-3)

| YEAR | EXPORT CRUDEOIL | EXPORT NON-OIL | EXPORT TOTAL | IMPORT TOTAL | *TRADE VALUE |
|------------------------|--------------------|-------------------|-----------------|-----------------|-----------------|
| 1987-88 | 10,755.0 | 1,161.0 | 11,916.0 | 13,236.0 | 14,397 |
| 1988-89 | 9,673.1 | 1,036.0 | 10,709.1 | 11,519.0 | 12,555 |
| 1989-90 | 12,037.0 | 1,044.0 | 13,081.0 | 14,666.0 | 15,710 |
| 1990-91 | 17,441.0 | 1,327.0 | 18,768.0 | 20,526.0 | 21,853 |
| 1991-92 | 15,802.0 | 2,613.0 | 18,415.0 | 27,445.0 | 30,058 |
| 1992-93 | 15,300.0 | 2,800.0 | 18,100.0 | 23,200.0 | 26,000 |
| 1993-94 | 16,305.4 | 3,280.2 | 19,585.6 | 24,759.0 | 28,039 |
| 1994-95 | 16,564.0 | 4,010.0 | 20,574.1 | 23,521.1 | 27,531 |
| 1995-96 | 16,826.8 | 4,785.7 | 21,612.4 | 24,250.2 | 29,036 |
| 1996-97 | 17,093.7 | 5,609.5 | 22,703.2 | 25,002.0 | 30,612 |
| 1997-98 | 17,364.8 | 6,484.2 | 23,849.0 | 25,777.1 | 32,261 |
| 1998-99 | 17,640.2 | 7,412.4 | 25,052.6 | 26,576.2 | 33,989 |
| 1999-00 | 17,920.0 | 8,397.0 | 26,317.0 | 27,373.4 | 35,770 |
| 2000-01 | 18,204.3 | 9,440.9 | 27,645.2 | 28,194.6 | 37,636 |
| 2001-02 | 18,493.0 | 10,547.4 | 29,040.5 | 29,040.5 | 39,588 |
| 2002-03 | 18,786.4 | 13,196.9 | 31,983.3 | 29,911.7 | 43,109 |
| 2003-04 | 19,084.4 | 13,796.3 | 32,880.6 | 30,809.0 | 44,605 |
| 2004-05 | 19,387.1 | 14,417.8 | 33,804.9 | 31,733.3 | 46,151 |
| 2005-06 | 19,694.6 | 15,062.3 | 34,756.9 | 32,685.3 | 47,748 |
| 2006-07 | 20,007.0 | 15,730.5 | 35,737.5 | 33,665.9 | 49,396 |
| 2007-08 | 20,324.3 | 16,423.1 | 36,747.4 | 34,675.8 | 51,099 |
| 2008-09 | 20,646.7 | 17,141.0 | 37,787.7 | 35,716.1 | 52,857 |
| 2009-10 | 20,974.2 | 17,885.0 | 38,859.2 | 36,787.6 | 54,673 |
| 2010-11 | 21,306.9 | 18,655.9 | 39,962.8 | 37,891.2 | 56,547 |
| 2010/2000 | 1.6% | 7.0% | 3.8% | 3.0% | 4.2% |
| NON-OIL / TOTAL EXP. = | | | 46.7% | | |

* TRADE VALUE (EXCLUDING OIL, OIL PRODUCT)

CARGO VOLUME (1,000 TONS)

| EXPORT VOLUME | IMPORT VOLUME | TOTAL VOLUME |
|------------------|------------------|-----------------|
| 1.132 | 15.348 | 16.480 |
| 1.224 | 13.376 | 14.600 |
| 1.455 | 19.240 | 20.695 |
| 1.242 | 20.540 | 21.782 |
| 2.831 | 21.500 | 24.331 |
| 3.438 | 21.113 | 24.551 |
| 3.279 | 19.737 | 23.016 |
| 4.827 | 25.481 | 30.308 |
| 5.761 | 26.271 | 32.032 |
| 6.752 | 27.085 | 33.838 |
| 7.805 | 27.925 | 35.730 |
| 8.922 | 28.791 | 37.713 |
| 10.107 | 29.655 | 39.762 |
| 11.364 | 30.544 | 41.908 |
| 12.058 | 31.853 | 43.911 |
| 12.794 | 33.218 | 46.012 |
| 13.575 | 34.642 | 48.217 |
| 14.404 | 36.127 | 50.530 |
| 15.283 | 37.675 | 52.958 |
| 16.216 | 39.290 | 55.505 |
| 17.206 | 40.973 | 58.179 |
| 18.256 | 42.729 | 60.986 |
| 19.371 | 44.561 | 63.931 |
| 20.553 | 46.470 | 67.024 |
| 6.1% | 4.3% | 4.8% |
| 30.7% | 69.3% | |

EXCLUDING OIL, OIL PRODUCTS

FUTURE TRADE FRAME (VALUE MILLION DOLLARS)
(CASE-4)

| YEAR | EXPORT CRUDEOIL | EXPORT NON-OIL | EXPORT TOTAL | IMPORT TOTAL | *TRADE VALUE |
|------------------------|--------------------|-------------------|-----------------|-----------------|-----------------|
| 1987-88 | 10,755.0 | 1,161.0 | 11,916.0 | 13,236.0 | 14,397 |
| 1988-89 | 9,673.1 | 1,036.0 | 10,709.1 | 11,519.0 | 12,555 |
| 1989-90 | 12,037.0 | 1,044.0 | 13,081.0 | 14,666.0 | 15,710 |
| 1990-91 | 17,441.0 | 1,327.0 | 18,768.0 | 20,526.0 | 21,853 |
| 1991-92 | 15,802.0 | 2,613.0 | 18,415.0 | 27,445.0 | 30,058 |
| 1992-93 | 15,300.0 | 2,800.0 | 18,100.0 | 23,200.0 | 26,000 |
| 1993-94 | 16,305.0 | 3,280.2 | 19,585.2 | 24,759.0 | 28,039 |
| 1994-95 | 16,460.2 | 3,894.9 | 20,355.1 | 23,521.1 | 27,416 |
| 1995-96 | 16,616.8 | 4,538.5 | 21,155.3 | 24,071.5 | 28,610 |
| 1996-97 | 16,775.0 | 5,212.0 | 21,986.9 | 24,634.8 | 29,847 |
| 1997-98 | 16,934.6 | 5,916.7 | 22,851.3 | 25,211.2 | 31,128 |
| 1998-99 | 17,095.8 | 6,653.8 | 23,749.6 | 25,801.1 | 32,455 |
| 1999-00 | 17,258.5 | 7,424.7 | 24,683.2 | 26,085.0 | 33,510 |
| 2000-01 | 17,422.7 | 8,230.8 | 25,653.5 | 26,371.9 | 34,603 |
| 2001-02 | 17,588.5 | 9,073.5 | 26,662.0 | 26,662.0 | 35,735 |
| 2002-03 | 17,755.9 | 11,642.5 | 29,398.3 | 26,955.3 | 38,598 |
| 2003-04 | 17,924.9 | 11,770.0 | 29,694.9 | 27,251.8 | 39,022 |
| 2004-05 | 18,095.4 | 11,899.2 | 29,994.6 | 27,551.5 | 39,451 |
| 2005-06 | 18,267.7 | 12,030.0 | 30,297.7 | 27,854.6 | 39,885 |
| 2006-07 | 18,441.5 | 12,162.6 | 30,604.1 | 28,161.0 | 40,324 |
| 2007-08 | 18,617.0 | 12,296.9 | 30,913.9 | 28,470.8 | 40,768 |
| 2008-09 | 18,794.2 | 12,432.9 | 31,227.0 | 28,784.0 | 41,217 |
| 2009-10 | 18,973.0 | 12,570.6 | 31,543.7 | 29,100.6 | 41,671 |
| 2010-11 | 19,153.6 | 12,710.2 | 31,863.8 | 29,420.7 | 42,131 |
| 2010/2000 | 1.0% | 4.4% | 2.2% | 1.1% | 2.0% |
| NON-OIL / TOTAL EXP. = | | | 40% | | |

* TRADE VALUE (EXCLUDING OIL, OIL PRODUCT)

(CASE-4) CARGO VOLUME (1,000 TONS)

| EXPORT VOLUME | IMPORT VOLUME | TOTAL VOLUME |
|------------------|------------------|-----------------|
| 1.132 | 15.348 | 16.480 |
| 1.224 | 13.376 | 14.600 |
| 1.455 | 19.240 | 20.695 |
| 1.242 | 20.540 | 21.782 |
| 2.831 | 21.500 | 24.331 |
| 3.438 | 21.113 | 24.551 |
| 3.279 | 19.737 | 23.016 |
| 4.688 | 25.481 | 30.170 |
| 5.463 | 26.077 | 31.540 |
| 6.274 | 26.688 | 32.961 |
| 7.122 | 27.312 | 34.434 |
| 8.009 | 27.951 | 35.960 |
| 8.937 | 28.259 | 37.196 |
| 9.907 | 28.570 | 38.477 |
| 10.256 | 29.244 | 39.501 |
| 10.617 | 29.935 | 40.552 |
| 10.991 | 30.642 | 41.633 |
| 11.378 | 31.366 | 42.744 |
| 11.778 | 32.107 | 43.885 |
| 12.193 | 32.865 | 45.058 |
| 12.622 | 33.641 | 46.264 |
| 13.067 | 34.436 | 47.503 |
| 13.527 | 35.249 | 48.776 |
| 14.003 | 36.082 | 50.085 |
| 3.5% | 2.4% | 2.7% |
| 28.0% | 72.0% | |

EXCLUDING OIL, OIL PRODUCTS

Appendix II-2.4 Cargo Flow at the port

| GENERAL CARGO / DISCHARGING | | GENERAL CARGO / LOADING | |
|-----------------------------|----------|-------------------------|-----------|
| VESSEL | (15 %) | TRUCKS | (100 %) |
| TRANSIT SHED | (0 %) | RAIL | (0 %) |
| OPEN YARD | (35 %) | TRUCKS | (100 %) |
| TRUCKS | (50 %) | RAIL | (0 %) |
| RAIL | (0 %) | TRUCKS | (30 %) |
| | | RAIL | (10 %) |
| | | TRUCKS | (60 %) |

| 2) BAGGED CARGO / DISCHARGING | |
|-------------------------------|----------|
| VESSEL | (90 %) |
| TRANSIT SHED | (10 %) |
| OPEN YARD | (0 %) |
| TRUCKS | (0 %) |
| RAIL | (0 %) |

| 3) SOLID BULK CARGO / DISCHARGING | |
|-----------------------------------|-----------|
| VESSEL | (100 %) |
| TANK | (0 %) |

| 4) METAL PRODUCTS / DISCHARGING | |
|---------------------------------|----------|
| VESSEL | (50 %) |
| OPEN YARD | (90 %) |
| TRUCKS | (10 %) |

APPX A Cargo Flow (Handling Ratio) in Imam Khomeini Port

1) GENERAL CARGO / DISCHARGING

VESSEL (15 %) TRANSIT SHED (100 %) TRUCKS
 (0 %) RAIL (0 %) RAIL
 (35 %) OPEN YARD (100 %) TRUCKS
 (0 %) RAIL (0 %) RAIL
 (50 %) TRUCKS
 (0 %) RAIL

GENERAL CARGO / LOADING

TRUCKS (100 %) TRANSIT SHED (30 %) VESSEL
 RAIL (0 %) RAIL
 TRUCKS (100 %) OPEN YARD (70 %)
 RAIL (0 %) RAIL
 TRUCKS (0 %)
 RAIL (0 %)

2) BAGGED CARGO / DISCHARGING

VESSEL (5 %) TRANSIT SHED (100 %) TRUCKS
 (0 %) RAIL (0 %) RAIL
 (5 %) OPEN YARD (100 %) TRUCKS
 (0 %) RAIL (0 %) RAIL
 (90 %) TRUCKS
 (0 %) RAIL

3) SOLID BULK CARGO / DISCHARGING

VESSEL (100 %) TRUCK
 (0 %) TANK

4) LIQUID BULK CARGO / DISCHARGING

VESSEL (100 %) TANK (100 %) TRUCKS
 (0 %) LORRY (0 %) RAIL

LIQUID BULK CARGO / LOADING----- MOLASSES

TRUCKS (0 %) TANK (0 %) VESSEL
 RAIL (0 %) RAIL
 TRUCK (100 %)

APDX B Cargo Flow (Handling Ratio)
 in Rajaeo Port

1) GENERAL CARGO / DISCHARGING

VESSEL (10 %) TRANSIT SHED (100 %) TRUCKS
 (0 %) RAIL (0 %) RAIL
 (20 %) OPEN YARD (100 %) TRUCKS
 (70 %) TRUCKS (0 %) RAIL
 (0 %) RAIL

GENERAL CARGO / LOADING

TRUCKS (100 %) TRANSIT SHED (45 %) VESSEL
 RAIL (0 %) RAIL
 TRUCKS (100 %) OPEN YARD (45 %)
 RAIL (0 %) RAIL
 TRUCKS (10 %)
 RAIL (0 %)

2) BAGGED CARGO / DISCHARGING

VESSEL (50 %) TRANSIT SHED (100 %) TRUCKS
 (0 %) RAIL (0 %) RAIL
 (0 %) OPEN YARD (0 %) TRUCKS
 (50 %) TRUCKS (0 %) RAIL
 (0 %) RAIL

3) SOLID BULK CARGO / DISCHARGING

VESSEL (100 %) TRUCK
 (0 %) TANK

4) LIQUID BULK CARGO / DISCHARGING (TO RASIT)

VESSEL (100 %) TANK (100 %) TRUCKS
 (0 %) LORRY (0 %) RAIL

APDX C Cargo Flow (Handling Ratio)
 in Anzali Port

Appendix II-2.5 Port Time of Vessels in Ports, 1992

| STAYING DAYS | B. I. K | BUSHEHRRAJAEE | BAHONARBEHESHIANZALI | NONSHAH | SOUTH TOTAL | NORTH TOTAL | TOTAL | | | |
|----------------------|---------|---------------|----------------------|---------|-------------|-------------|-------|-------|------|------|
| 1 | 28 | 10 | 46 | 4 | 1 | 148 | 82 | 89 | 230 | 319 |
| 2 | 30 | 36 | 47 | 5 | 4 | 36 | 18 | 122 | 54 | 176 |
| 3 | 41 | 32 | 48 | 11 | 10 | 28 | 13 | 142 | 41 | 183 |
| 4 | 34 | 18 | 41 | 6 | 7 | 27 | 6 | 106 | 33 | 139 |
| 5 | 30 | 6 | 31 | 6 | 7 | 23 | 14 | 80 | 37 | 117 |
| 6 | 34 | 4 | 33 | 4 | 6 | 13 | 2 | 81 | 15 | 96 |
| 7 | 33 | 5 | 23 | 2 | 1 | 5 | 2 | 64 | 7 | 71 |
| 8 | 30 | 1 | 18 | 3 | 0 | 5 | 5 | 52 | 10 | 62 |
| 9 | 22 | 0 | 24 | 0 | 1 | 2 | 1 | 47 | 3 | 50 |
| 10 | 25 | 1 | 14 | 3 | 0 | 4 | 4 | 43 | 8 | 51 |
| 11 | 17 | 2 | 26 | 2 | 0 | 2 | 3 | 47 | 5 | 52 |
| 12 | 16 | 3 | 25 | 0 | 0 | 0 | 1 | 44 | 1 | 45 |
| 13 | 15 | 2 | 19 | 2 | 0 | 3 | 0 | 38 | 3 | 41 |
| 14 | 14 | 1 | 22 | 4 | 1 | 0 | 1 | 42 | 1 | 43 |
| 15 | 13 | 1 | 17 | 3 | 1 | 0 | 1 | 35 | 1 | 36 |
| 16 | 22 | 0 | 14 | 2 | 3 | 0 | 0 | 41 | 0 | 41 |
| 17 | 14 | 1 | 16 | 4 | 2 | 0 | 0 | 37 | 0 | 37 |
| 18 | 7 | 1 | 20 | 1 | 0 | 0 | 0 | 29 | 0 | 29 |
| 19 | 8 | 2 | 16 | 2 | 1 | 0 | 1 | 29 | 1 | 30 |
| 20 | 8 | 0 | 10 | 1 | 3 | 0 | 0 | 22 | 0 | 22 |
| 21 | 7 | 1 | 9 | 1 | 2 | 0 | 0 | 20 | 0 | 20 |
| 22 | 5 | 2 | 10 | 0 | 4 | 0 | 0 | 21 | 0 | 21 |
| 23 | 5 | 2 | 10 | 3 | 2 | 0 | 0 | 22 | 0 | 22 |
| 24 | 6 | 1 | 8 | 2 | 2 | 0 | 0 | 19 | 0 | 19 |
| 25 | 5 | 1 | 1 | 1 | 0 | 0 | 0 | 8 | 0 | 8 |
| 26 | 5 | 0 | 9 | 0 | 1 | 1 | 0 | 15 | 1 | 16 |
| 27 | 5 | 2 | 3 | 0 | 2 | 0 | 0 | 12 | 0 | 12 |
| 28 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 4 |
| 29 | 3 | 0 | 5 | 0 | 1 | 0 | 0 | 9 | 0 | 9 |
| 30 | 5 | 1 | 4 | 1 | 1 | 0 | 0 | 12 | 0 | 12 |
| 30 - | 19 | 11 | 31 | 16 | 5 | 1 | 0 | 82 | 1 | 83 |
| TOTAL | 508 | 148 | 600 | 89 | 69 | 298 | 154 | 1414 | 452 | 1866 |
| AVERAGE STAYING DAYS | 11.12 | 8.90 | 11.36 | 15.80 | 14.01 | 2.98 | 2.98 | 11.43 | 2.98 | 9.38 |

Source: PSO

Appendix II-2.6 Service Time of Vessels in Ports, 1992

| BERTHING DAYS | B. I. K | BUSHEHRRAJAEE | BAHONARBEHESHIANZALI | NONSHAH | SOUTH TOTAL | NORTH TOTAL | TOTAL | | | |
|-----------------------|---------|---------------|----------------------|---------|-------------|-------------|-------|------|------|------|
| 1 | 38 | 30 | 61 | 9 | 7 | 157 | 86 | 145 | 243 | 388 |
| 2 | 34 | 54 | 74 | 16 | 11 | 37 | 15 | 189 | 52 | 241 |
| 3 | 45 | 18 | 58 | 10 | 12 | 26 | 14 | 143 | 40 | 183 |
| 4 | 25 | 5 | 40 | 7 | 4 | 26 | 8 | 81 | 34 | 115 |
| 5 | 36 | 3 | 32 | 2 | 0 | 22 | 13 | 73 | 35 | 108 |
| 6 | 36 | 2 | 33 | 3 | 2 | 12 | 3 | 76 | 15 | 91 |
| 7 | 39 | 1 | 26 | 2 | 1 | 8 | 3 | 69 | 11 | 80 |
| 8 | 30 | 1 | 25 | 3 | 2 | 2 | 5 | 61 | 7 | 68 |
| 9 | 31 | 1 | 19 | 5 | 0 | 3 | 2 | 56 | 5 | 61 |
| 10 | 24 | 1 | 24 | 6 | 0 | 0 | 1 | 55 | 1 | 56 |
| 11 | 12 | 2 | 27 | 3 | 0 | 2 | 1 | 44 | 3 | 47 |
| 12 | 20 | 3 | 19 | 0 | 1 | 0 | 1 | 43 | 1 | 44 |
| 13 | 19 | 0 | 15 | 3 | 0 | 2 | 0 | 37 | 2 | 39 |
| 14 | 13 | 1 | 19 | 7 | 2 | 0 | 1 | 42 | 1 | 43 |
| 15 | 25 | 1 | 23 | 2 | 1 | 0 | 1 | 52 | 1 | 53 |
| 16 | 18 | 1 | 20 | 2 | 2 | 0 | 0 | 43 | 0 | 43 |
| 17 | 11 | 2 | 7 | 2 | 2 | 0 | 0 | 24 | 0 | 24 |
| 18 | 2 | 2 | 7 | 0 | 2 | 0 | 0 | 13 | 0 | 13 |
| 19 | 11 | 2 | 15 | 1 | 2 | 0 | 0 | 31 | 0 | 31 |
| 20 | 8 | 1 | 10 | 1 | 4 | 0 | 0 | 24 | 0 | 24 |
| 21 | 1 | 1 | 6 | 1 | 3 | 0 | 0 | 12 | 0 | 12 |
| 22 | 2 | 2 | 5 | 1 | 0 | 0 | 0 | 10 | 0 | 10 |
| 23 | 2 | 1 | 8 | 0 | 2 | 0 | 0 | 13 | 0 | 13 |
| 24 | 4 | 1 | 5 | 0 | 1 | 0 | 0 | 11 | 0 | 11 |
| 25 | 1 | 1 | 3 | 1 | 2 | 0 | 0 | 8 | 0 | 8 |
| 26 | 4 | 0 | 3 | 0 | 2 | 1 | 0 | 9 | 1 | 10 |
| 27 | 2 | 1 | 4 | 0 | 0 | 0 | 0 | 7 | 0 | 7 |
| 28 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 5 |
| 29 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| 30 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 0 | 3 |
| 30 - | 9 | 9 | 9 | 2 | 3 | 0 | 0 | 32 | 0 | 32 |
| TOTAL | 508 | 148 | 600 | 89 | 69 | 298 | 154 | 1414 | 452 | 1866 |
| AVERAGE BERTHING DAYS | 9.53 | 7.24 | 8.83 | 7.93 | 11.49 | 2.58 | 2.69 | 8.99 | 2.62 | 7.44 |

Appendix II-2.7 Operation Days of Vessels in Ports, 1992

| OPERATION DAYS | B. I. K | BUSHEHRRAJAEE | BAHONARBEHESHIANZALI | NOWSHAH | SOUTH TOTAL | NORTH TOTAL | TOTAL | | | |
|------------------------|---------|---------------|----------------------|---------|-------------|-------------|-------|------|------|------|
| 1 | 55 | 45 | 95 | 16 | 7 | 173 | 95 | 218 | 268 | 486 |
| 2 | 32 | 50 | 66 | 17 | 15 | 42 | 14 | 180 | 56 | 236 |
| 3 | 40 | 10 | 48 | 7 | 9 | 18 | 9 | 114 | 27 | 141 |
| 4 | 36 | 4 | 34 | 4 | 3 | 24 | 7 | 81 | 31 | 112 |
| 5 | 36 | 2 | 37 | 4 | 0 | 15 | 14 | 79 | 29 | 108 |
| 6 | 27 | 1 | 30 | 0 | 3 | 12 | 0 | 61 | 12 | 73 |
| 7 | 41 | 1 | 28 | 3 | 2 | 6 | 5 | 73 | 11 | 84 |
| 8 | 27 | 2 | 21 | 5 | 1 | 3 | 4 | 56 | 7 | 63 |
| 9 | 30 | 0 | 25 | 6 | 0 | 1 | 1 | 61 | 2 | 63 |
| 10 | 23 | 2 | 23 | 3 | 0 | 0 | 3 | 51 | 3 | 54 |
| 11 | 12 | 1 | 23 | 3 | 1 | 1 | 0 | 40 | 1 | 41 |
| 12 | 23 | 3 | 19 | 1 | 0 | 1 | 0 | 46 | 1 | 47 |
| 13 | 11 | 0 | 18 | 2 | 1 | 1 | 1 | 32 | 2 | 34 |
| 14 | 21 | 2 | 22 | 6 | 1 | 0 | 1 | 52 | 1 | 53 |
| 15 | 23 | 1 | 20 | 4 | 1 | 0 | 0 | 49 | 0 | 49 |
| 16 | 16 | 0 | 13 | 0 | 2 | 0 | 0 | 31 | 0 | 31 |
| 17 | 5 | 2 | 6 | 2 | 2 | 0 | 0 | 17 | 0 | 17 |
| 18 | 7 | 3 | 10 | 0 | 3 | 0 | 0 | 23 | 0 | 23 |
| 19 | 9 | 1 | 14 | 2 | 1 | 0 | 0 | 27 | 0 | 27 |
| 20 | 5 | 1 | 7 | 1 | 5 | 0 | 0 | 19 | 0 | 19 |
| 21 | 3 | 1 | 6 | 0 | 2 | 0 | 0 | 12 | 0 | 12 |
| 22 | 1 | 2 | 6 | 1 | 1 | 0 | 0 | 11 | 0 | 11 |
| 23 | 2 | 2 | 6 | 0 | 2 | 0 | 0 | 12 | 0 | 12 |
| 24 | 2 | 1 | 7 | 1 | 1 | 0 | 0 | 12 | 0 | 12 |
| 25 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 5 | 0 | 5 |
| 26 | 4 | 1 | 6 | 0 | 2 | 1 | 0 | 13 | 1 | 14 |
| 27 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 5 | 0 | 5 |
| 28 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 29 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 5 | 0 | 5 |
| 30 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 30 - | 8 | 8 | 6 | 1 | 2 | 0 | 0 | 25 | 0 | 25 |
| TOTAL no. | 508 | 148 | 600 | 89 | 69 | 298 | 154 | 1414 | 452 | 1866 |
| AVERAGE OPERATION DAYS | 8.93 | 6.55 | 8.36 | 7.15 | 10.74 | 2.32 | 2.47 | 8.41 | 2.37 | 6.95 |

Source: PSO

Appendix II-2.8 Vessel moored Over 30 Days in Ports

| NAME | PORT | PORT CODE | ARRV DATE TIME | DEPART DATE TIME | OPER START | OPER END | DEPUR IN DATE CD | CARGO IN | EX CD | CARGO NO | EX BRT | BERTHING DAYS | OPERATION DAYS |
|---------------|-----------------|-----------|----------------|------------------|------------|----------|------------------|----------|-------|----------|--------|---------------|----------------|
| IRAN ASTGHAL | IMAM KHONEINI | 0 | 92/02/27 11:31 | 92/02/27 15:30 | 92/02/27 | 92/03/27 | 92/03/28 3 | 28852 | 0 | 0 | 0 | 23 | 29 |
| ATLANTIK | IMAM KHONEINI | 0 | 92/09/03 09:52 | 92/09/03 23:00 | 92/09/03 | 92/10/04 | 92/10/04 13 | 55000 | 0 | 0 | 0 | S | 31 |
| DRDTMIS | IMAM KHONEINI | 0 | 92/09/05 09:05 | 92/09/06 23:00 | 92/09/06 | 92/10/11 | 92/10/13 19 | 28308 | 0 | 0 | 0 | 22 | 35 |
| SI FAITH | IMAM KHONEINI | 0 | 92/05/11 11:50 | 92/05/11 00:24 | 92/05/11 | 92/06/19 | 92/06/19 16 | 26238 | 0 | 0 | 0 | 26 | 39 |
| IRAN GHAZI | IMAM KHONEINI | 0 | 92/09/08 16:15 | 92/09/08 21:40 | 92/09/08 | 92/10/18 | 92/10/19 3 | 31889 | 0 | 0 | 0 | 25 | 41 |
| SI BALK | IMAM KHONEINI | 0 | 92/11/28 16:08 | 92/12/01 24:00 | 92/12/01 | 93/01/10 | 93/01/11 13 | 58598 | 0 | 0 | 0 | 23 | 40 |
| IRAN GHFARI | IMAM KHONEINI | 0 | 92/08/08 18:55 | 92/08/09 00:30 | 92/08/09 | 92/09/21 | 92/09/21 3 | 35422 | 0 | 0 | 0 | 3 | 43 |
| BRGN KOIJN | IMAM KHONEINI | 0 | 92/12/09 : | 92/12/13 21:50 | 92/12/13 | 93/01/25 | 93/01/25 13 | 31500 | 18 | 25188 | 3 | 43 | 43 |
| IRAN ASHRFI | IMAM KHONEINI | 0 | 92/10/30 17:18 | 92/10/31 03:40 | 92/10/31 | 93/01/23 | 93/01/23 13 | 31500 | 27 | 0 | S | 84 | 84 |
| IRAN ASHRFI | IMAM KHONEINI | 0 | 92/10/30 17:18 | 92/10/30 17:18 | 93/01/30 | 93/02/02 | 93/02/02 0 | 0 | 27 | 31233 | Z | 95 | 3 |
| IRAN ASTGHAL | BOOSHEHR | F | 92/12/14 13:34 | 92/12/15 24:00 | 92/12/15 | 93/01/15 | 93/01/15 16 | 20485 | 0 | 0 | 0 | 1 | 31 |
| KASTAS ACH | BOOSHEHR | F | 92/02/15 10:30 | 92/02/20 : | 92/02/20 | 92/03/23 | 92/03/24 3 | 10810 | 0 | 0 | 0 | 1 | 33 |
| NROS | BOOSHEHR | F | 92/11/30 14:30 | 92/12/20 : | 92/12/20 | 93/01/22 | 93/01/22 19 | 14147 | 0 | 0 | 0 | 2 | 33 |
| SADI | BOOSHEHR | F | 91/12/19 06:30 | 92/01/01 14:00 | 92/01/01 | 92/02/04 | 92/02/04 99 | 5761 | 99 | 0 | 0 | 1 | 34 |
| IRAN MTHRI | BOOSHEHR | F | 92/12/07 04:20 | 92/12/11 : | 92/12/11 | 93/01/14 | 93/01/14 23 | 22088 | 0 | 0 | 0 | Y2 | 34 |
| IRAN SRBAZ | BOOSHEHR | F | 92/11/14 01:30 | 92/11/17 : | 92/11/17 | 92/12/22 | 92/12/23 23 | 25546 | 0 | 0 | 0 | Y2 | 35 |
| IRAN MDRS | BOOSHEHR | F | 92/08/15 08:00 | 92/08/16 08:00 | 92/08/16 | 92/09/23 | 92/09/24 23 | 26366 | 0 | 0 | 0 | 2 | 38 |
| IRAN AGRAL | BOOSHEHR | F | 92/08/22 14:00 | 92/08/23 : | 92/08/23 | 92/10/14 | 92/10/14 23 | 39300 | 0 | 0 | 0 | 1 | 52 |
| IRAN FLANI | BOOSHEHR | F | 92/11/12 10:15 | 92/11/12 17:45 | 92/11/12 | 92/12/05 | 93/02/03 3 | 17510 | 0 | 0 | 0 | 1 | 83 |
| SI BI | SHAHID RAJAI | V | 92/06/15 04:00 | 92/06/18 07:07 | 92/06/19 | 92/07/17 | 92/07/18 25 | 43639 | 0 | 0 | 0 | 18 | 28 |
| LOPRTI | SHAHID RAJAI | V | 92/06/22 14:50 | 92/06/25 18:30 | 92/06/25 | 92/07/25 | 92/07/26 1 | 23845 | 0 | 0 | 0 | 23 | 30 |
| IRAN ANTKHAB | SHAHID RAJAI | V | 92/10/16 19:28 | 92/10/17 24:00 | 92/10/17 | 92/11/16 | 92/11/17 23 | 25872 | 0 | 0 | 0 | 4 | 31 |
| BALK | SHAHID RAJAI | V | 92/12/16 21:45 | 92/12/24 01:20 | 92/12/24 | 93/01/24 | 93/01/25 13 | 43022 | 0 | 0 | 0 | 6 | 31 |
| PARAIKQIN OAL | SHAHID RAJAI | V | 92/08/13 03:40 | 92/08/19 01:30 | 92/08/19 | 92/09/20 | 92/09/21 0 | 0 | 18 | 25216 | 12 | 32 | 31 |
| IRAN JMHUPI | SHAHID RAJAI | V | 92/02/13 24:00 | 92/02/19 24:00 | 92/02/19 | 92/03/24 | 92/03/25 16 | 24000 | 99 | 0 | 0 | 6 | 34 |
| IRAN ASHRAGHI | SHAHID RAJAI | V | 92/07/17 12:55 | 92/07/24 17:30 | 92/07/24 | 92/08/28 | 92/08/28 23 | 37706 | 0 | 0 | 0 | 7 | 35 |
| BOSKO 3 | SHAHID RAJAI | V | 92/09/16 07:40 | 92/09/19 18:25 | 92/09/19 | 92/11/02 | 92/11/02 99 | 15437 | 1 | 2441 | 21 | 44 | 44 |
| IRAN NOAB | SHAHID RAJAI | V | 92/10/13 20:55 | 92/10/16 14:45 | 92/10/16 | 92/10/31 | 92/11/30 13 | 31500 | 0 | 0 | 0 | 20 | 15 |
| ALI MARI | SHAHID RAJAI | V | 92/12/05 06:54 | 92/12/12 14:20 | 92/12/12 | 93/01/31 | 93/01/31 3 | 21298 | 1 | 22000 | 22 | 50 | 50 |
| SADI | SHAHID BAHONAR | U | 92/09/11 : | 92/09/13 14:45 | 92/10/12 | 92/10/13 | 92/10/14 | 0 | 71 | 1700 | KS | 31 | 1 |
| JIMI | SHAHID BAHONAR | U | 92/12/20 14:30 | 92/12/29 04:10 | 92/12/29 | 93/01/29 | 93/01/30 | 0 | 1 | 34469 | 2 | 32 | 31 |
| MARASTI | SHAHID BEHESHTI | P | 92/04/24 17:25 | 92/04/27 : | 92/04/27 | 92/05/26 | 92/05/27 3 | 14250 | 0 | 0 | 0 | 0 | 29 |
| IRAN MDRS | SHAHID BEHESHTI | P | 92/12/09 01:30 | 92/12/13 : | 93/01/18 | 93/01/25 | 93/01/25 23 | 31000 | 99 | 0 | 0 | 2 | 43 |
| IRAN GHODSI | SHAHID BEHESHTI | P | 92/07/27 17:45 | 92/08/13 23:52 | 92/08/13 | 92/09/27 | 92/09/28 23 | 40892 | 0 | 0 | 0 | 2 | 46 |
| MORT ALLRD | SHAHID BEHESHTI | P | 92/05/29 17:45 | 92/05/30 17:40 | 92/05/30 | 92/07/17 | 92/07/17 23 | 12208 | 0 | 0 | 0 | 0 | 48 |

Appendix II-2.9 Container Handling Operation

1) CONTAINER / DISCHARGING

VESSEL (80 %) CONTAINER YARD (0 %) CONTAINER FREIGHT (0 %) DIRECT (0 %) TRUCKS (100 %) TRUCKS
 STATION (0 %) VESSEL
 (90 %) TRUCKS
 (10 %) RAIL
 (20 %) CONTAINER FREIGHT (0 %) CONTAINER YARD _____ VESSEL
 STATION (0 %) VESSEL
 (100 %) TRUCKS
 (0 %) DIRECT DELIVERY (0 %) RAIL

Container Cargo Flow (Handling Ratio) in Imam Khomeini Port

2) CONTAINER / LOADING

TRUCKS (100 %) CONTAINER FREIGHT (100 %) CONTAINER YARD _____ VESSEL
 RAIL (0 %) STATION
 TRUCKS (0 %) (0 %)
 RAIL (0 %) (0 %)
 DIRECT (0 %) VESSEL

1) CONTAINER / DISCHARGING

VESSEL (55 %) CONTAINER YARD (0 %) CONTAINER FREIGHT (0 %) DIRECT (0 %) TRUCKS (100 %) TRUCKS
 STATION (0 %) VESSEL
 (100 %) TRUCKS
 (0 %) RAIL
 (45 %) CONTAINER FREIGHT (0 %) CONTAINER YARD _____ VESSEL
 STATION (0 %) VESSEL
 (100 %) TRUCKS
 (0 %) DIRECT DELIVERY (0 %) RAIL

Container Cargo Flow (Handling Ratio) in Rajace Port

2) CONTAINER / LOADING

TRUCKS (100 %) CONTAINER FREIGHT (00 %) CONTAINER YARD _____
 RAIL (0 %) STATION
 TRUCKS (100 %) (40 %)
 RAIL (0 %) (0 %)
 DIRECT (0 %) VESSEL

1) CONTAINER / DISCHARGING

| | | | |
|--------|------------------------------------|-----------------------------------|-------------------------------|
| VESSEL | (80 %) CONTAINER YARD | (0 %) CONTAINER FREIGHT STATION | (0 %) DIRECT (100 %) TRUCKS |
| | | (0 %) VESSEL | RAIL |
| | | (100 %) TRUCKS | |
| | | (0 %) RAIL | |
| | (20 %) CONTAINER FREIGHT STATION | (0 %) CONTAINER YARD | VESSEL |
| | | (0 %) VESSEL | |
| | | (0 %) TRUCKS | |
| | (0 %) DIRECT DELIVERY | (0 %) RAIL | |

Container Cargo Flow (Handling Ratio) in Anzali Port

Appendix II-2.10 Cargo Handling Equipment

Table 2.6.2.1 List of Cargo Handling Equipment Imam Khomeini Port

| Type | Location (No of Berth) | Capacity | Produced | | No of Equipment | | | Remarks |
|--|------------------------------|---------------------------------|----------|-----|-----------------|------|-----|----------------------------|
| | | | Year | Age | Total | Good | Bad | |
| Container Crane | 11-14 | 40 t | 1977 | | 2 | 1 | 1 | |
| Portal Jib crane | 16-19 | 6tx25m 15tx15m 15tx8 | | 0 | 6 | | | For general cargo |
| Tyre-mounted Hopper | 6 | 500t/h | | | 2 | | | For aluminium powder |
| Tyre-mounted continous mechanical unloader | 5 | 300 t/h | | 20 | 1 | | 1 | For Grain |
| Floating unloader (Double-links level luffing type) | between 3 and 4 | 1000 t/h 25tx36m 50tx20m | | | 2 | 1 | 1 | For ore |
| Continous mechanical unloader with pneumatic unloader | Grain jetty | M1000 t/h Pn 250 t/hx2 | | | 2 | | | For Grain |
| Grain loader | " | 1000 t/h | | | 1 | | | " " |
| Tyre mounted pneumatic unloader | | 280 t/h | 1989 | | 2 | 2 | | at berth No. 14 |
| Transfer crane | | 40 t | | | 2 | | | |
| Mobile crane | | 550 | 1993 | | 1 | 1 | 0 | |
| | | 90 | 1973 | | 1 | 1 | 0 | K.L.B |
| | | 60 | 1993 | | 2 | 2 | 0 | |
| | | 50 | 1970 | | 1 | 0 | 1 | |
| | | 475 | 1993 | | 1 | 1 | 0 | K.L.B |
| | | 40 | 1992 | | 2 | 2 | 0 | |
| | | 35 | 1991 | | 1 | 1 | 0 | |
| | | 35 | 1973 | | 5 | 0 | 5 | |
| | | 275 | 1992 | | 2 | 2 | 0 | PS01 |

Table 2.6.2.2 List of Cargo Handling Equipment Imam Khomeini port

| Type | Location (No of Berth) | Capacity | Produced | | No of Equipment | | | Remarks |
|---------------------------------|------------------------------|----------|----------|-----|-----------------|------|-----|------------------|
| | | | Year | Age | Total | Good | Bad | |
| | | 25 | 1993 | | 4 | 4 | 0 | |
| | | 20 | 1991 | | 5 | 0 | 5 | |
| | | 15 | 1973 | | 6 | 0 | 6 | |
| | | 15 | 1971 | | 4 | 0 | 4 | |
| | | 10 | 1956 | | 2 | 1 | 1 | |
| | | 8 | 1983 | | 2 | 0 | 2 | |
| | | 8 | 1973 | | 6 | 2 | 4 | |
| | | 8 | 1972 | | 1 | 0 | 1 | |
| | | 6 | 1959 | | 1 | 0 | 1 | |
| Fork-lift Truck (top lifter) | | 40 | | | 5 | | | For container |
| Fork-lift Truck | | 15 | 1993 | | 1 | 1 | 0 | |
| | | | 1991 | | 1 | 1 | 0 | |
| | | | 1983 | | 2 | 1 | 1 | |
| | | 13.5 | 1982 | | 3 | 1 | 2 | |
| | | 10 | 1993 | | 5 | 5 | 0 | |
| | | | 1991 | | 5 | 5 | 0 | |
| | | | 1981 | | 1 | 0 | 1 | |
| | | | 1980 | | 2 | 0 | 2 | |
| | | | 1979 | | 2 | 0 | 2 | |
| | | 7 | 1993 | | 2 | 2 | 0 | |
| | | | 1991 | | 2 | 2 | 0 | |
| | | | 1982 | | 4 | 2 | 2 | |
| | | 5 | 1991 | | 8 | 8 | 0 | |

Table 2.6.2.3 List of Cargo Handling Equipment Imam Khomeini Port

| Type | Location (No of Berth) | Capacity | Produced | | No of Equipment | | | Remarks |
|------------------|------------------------------|----------|----------|-----|-----------------|------|-----|---------|
| | | | Year | Age | Total | Good | Bad | |
| | | | 1984 | | 1 | 1 | 0 | |
| | | 4.5 | 1993 | | 9 | 9 | 0 | |
| | | 2.5 | 1993 | | 1 | 1 | 0 | |
| Tractor | | | 1992 | | 5 | 5 | 0 | |
| | | | 1991 | | 32 | 32 | 0 | |
| | | | 1988 | | 12 | 12 | 0 | |
| | | | 1986 | | 1 | 0 | 1 | |
| | | | 1982 | | 5 | 0 | 5 | |
| | | | 1981 | | 3 | 0 | 3 | |
| | | | 1980 | | 9 | 0 | 9 | |
| | | | 1979 | | 12 | 0 | 12 | |
| | | | 1978 | | 2 | 0 | 2 | |
| | | | 1977 | | 4 | 0 | 4 | |
| Push Truck | | | 1993 | | 6 | 6 | | |
| Raily Road Crane | | 20 | 1994 | | 1 | | | |
| | | 10 | 1994 | | 3 | | | |

Table 2.6.2.4 List of Cargo Handling Equipment (2/2)
Anzali

| Name | Type | Loc. (No. of Berth) | Capacity | Procured | | No. of equ. | | | Re- marks |
|------|--------------------------------------|---------------------------|----------|----------|-----|-------------|----|----|----------------|
| | | | | year | age | T. | G. | B. | |
| | Portal Job Cranes (Rail-mounted) | A4 | 16 t | | | 2 | 2 | | Guay Cranes |
| | Do | A4 | 10 t | | | 1 | 1 | | Guay Crane |
| | Do | Behind A4 | 10 t | | | 2 | | | Yard Cranes |
| | Pneumatic unloader (tyre-mounted) | Mainly used A4 | 150 t/h | | | 2 | | | 2 |
| | Mobile Cranes | | 62 t | 1992 | | 1 | 1 | | |
| | | | 60 t | 1976 | | 1 | | 1 | 1 |
| | | | 60 t | 1979 | | 1 | | 1 | |
| | | | 40 t | 1981 | | 2 | 2 | | 2 |
| | | | 40 t | 1991 | | 1 | 1 | | |
| | | | 40 t | 1992 | | 1 | 1 | | 2 |
| | | | 25 t | 1992 | | 3 | 3 | | |
| | | | 20 t | 1992 | | 1 | 1 | | 2 |
| | | | 16 t | 1992 | | 2 | 2 | | |
| | | | 15 t | 1981 | | 1 | 1 | | |
| | | | 15 t | 1985 | | 1 | 1 | | |
| | | | 10 t | 1972 | | 3 | 1 | 2 | |
| | | | | 1973 | | 2 | 1 | 1 | 4 |
| | | | | 1979 | | 3 | 1 | 2 | |
| | | | 6 t | 1992 | | 1 | 1 | | 3 |
| | | | | | | 24 | | | |
| | Forks-lift trucks (Top lifter) | | 42 t | 1992 | | 2 | 2 | | |
| | Forks-lift trucks | | 13.5 t | 1985 | | 1 | 1 | | |

Table 2.6.2.5 List of Cargo Handling Equipment (1/2)
Anzali

| Name | Type | Loc. (No. of Berth) | Capacity | Procured | | No. of eqpt. | | | Remarks |
|------|-------------------|---------------------------|----------|----------|-----|--------------|----|----|---------|
| | | | | Year | Age | T. | G. | B. | |
| | Forks-lift trucks | | 10 t | 1984 | | 2 | 2 | | |
| | | | 10 t | 1979 | | 1 | | 1 | |
| | | | | 1985 | | 2 | 1 | 1 | |
| | | | | 1990 | | 2 | 2 | | |
| | | | 7 t | 1984 | | 4 | | 4 | |
| | | | 7 t | 1991 | | 1 | 1 | | |
| | | | 7 t | 1992 | | 1 | 1 | | |
| | | | 5 t | 1991 | | 2 | 2 | | |
| | | | 4.5 t | 1992 | | 2 | 2 | | |
| | Tractors 650 | | | 1974 | | 3 | 3 | | |
| | | | | 1975 | | 1 | 1 | | |
| | | | | 1977 | | 7 | 7 | | |
| | | | | 1979 | | 8 | 8 | | |
| | | | | 1980 | | 1 | 1 | | |
| | | | | 1981 | | 2 | 2 | | |
| | 285 | | | 1993 | | 2 | 2 | | |
| | | | | 1993 | | 4 | 4 | | |

Note:
T: Means Total
G: Means Good
B: Means Bad

Table 2.6.2.6 List of Cargo Handling Equipment (1/2)
Rajae

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|---------|--|---------------------|------------|----------|-----|-------------|------|-----|---------|
| | | | | year | age | Total | good | bad | |
| | Container Crane | C.T | 40t | 1990 | | 2 | 2 | | |
| | Portal Jib Crane (Rail-Mounted) | J.N 14~10 | 15t | 1990 | | 6 | 6 | | |
| | Pneumatic Unloaded (Tyre- mounted) | J.N 14~20 | 300 t/h | 1991 | | 2 | 2 | | |
| Pioneer | Transfer Crane | C.T | 40t | 1975 | | 3 | 3 | | |
| Samsun | Ditto | C.T | 40t | 1993 | | 7 | 7 | | |
| Lib | Mobile Crane | C.T | 550t | 1990 | | 1 | 1 | | |
| Monit | Ditto | E.T | 110t | 1979 | | 1 | | 1 | |
| Monit | Ditto | Work-shop | 100t | 1970 | | 1 | | 1 | |
| L.B | Ditto | E.T | 90t | 1979 | | 1 | 1 | | |
| Tadano | Ditto | | 80t | 1970 | | 1 | 1 | | |
| | Ditto | E.T | 60t | 1991 | | 2 | 2 | | |
| Link-B | Ditto | E.T | 40t | 1991 | | 2 | 2 | | |
| I.H.I | Ditto | E.T | 40t | 1991 | | 4 | 4 | | |
| Johns | Ditto | E.T | 40t | 1982 | | 2 | | 2 | |
| Tadano | Ditto | P. Bah | 30t | 1985 | | 1 | | 1 | |
| Johns | Ditto | C.T | 30t | 1985 | | 1 | 1 | | |
| Johns | Ditto | E.T | 30t | 1982 | | 1 | | 1 | |
| I.H.I | Ditto | E.T | 25t | 1991 | | 4 | 4 | | |
| Johns | Ditto | E.T | 25t | 1991 | | 5 | 5 | | |
| Johns | Ditto | T3 | 15t | 1982 | | 1 | 1 | | |

Table 2.6.2.7 List of Cargo Handling Equipment (2/2)
Rajae

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|---------|------------------------------|---------------------|--------|----------|-----|-------------|------|-----|---------|
| | | | | year | age | Total | good | bad | |
| Johns | Mobile Crane | E. T | 15t | 1982 | | 1 | 1 | | |
| Johns | Ditto | T3 | 15t | 1990 | | 1 | 1 | | |
| Johns | Ditto | | 12t | 1982 | | 8 | 7 | 1 | |
| Johns | Ditto | T3 | 7t | 1982 | | 6 | 5 | 1 | |
| | Fork-lift Truck (top lifter) | C. T | 35t | 1988 | | 4 | 4 | | |
| | Ditto | | 35t | 1991 | | 1 | 1 | | |
| Komatsu | Fork-lift Truck | | 15t | 1990 | | 1 | 1 | | |
| TUR | Ditto | | 13t | 1983 | | 16 | 12 | 4 | |
| Komatsu | Ditto | | 10t | 1981 | | 7 | 2 | 5 | |
| Lind | Ditto | | 10t | 1990 | | 2 | 2 | | |
| Komatsu | Ditto | P. L | 7t | 1990 | | 2 | 2 | | |
| T. C. M | Ditto | | 7t | 1983 | | 18 | 13 | 5 | |
| Lind | Ditto | E. T | 7t | 1990 | | 1 | 1 | | |
| Komatsu | Ditto | | 5t | 1990 | | 2 | 2 | | |
| Komatsu | Ditto | | 5t | 1983 | | 2 | | 2 | |
| Komatsu | Ditto | | 4.5t | 1990 | | 13 | 13 | | |
| Komatsu | Ditto | | 3t | 1983 | | 3 | | 3 | |
| Komatsu | Ditto | | 2.5t | 1990 | | 4 | 2 | 2 | |
| Komatsu | Ditto | | 1t | 1990 | | 1 | 1 | | |
| — | Tractor | | 40H. P | 1978 | | 36 | 27 | 9 | |
| — | Ditto | | 15H. P | 1970 | | 18 | 18 | | |

Table 2.6.2.8 List of Cargo Handling Equipment (1/2)
Chabahar

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|---------|-----------------------------------|---------------------|---------|----------|-----|-------------|------|-----|---------|
| | | | | year | age | Total | good | bad | |
| Neuero | Pneumatic unloader (Tyre-mounted) | | 150 t/h | 1989 | | 1 | 1 | | Rent 02 |
| | | | 150 t/h | 1989 | | 1 | 1 | | " |
| | | | 150 t/h | 1989 | | 1 | 1 | | " |
| | | | 150 t/h | 1989 | | 1 | 1 | | " |
| Johns | Mobile Crane | | 40t | 1981 | | 1 | | 1 | |
| Kato | Ditto | | 35t | 1991 | | 1 | 1 | | |
| Hyco | Ditto | | 25t | 1981 | | 1 | 1 | | |
| Johns 1 | Ditto | | 10t | 1981 | | 1 | 1 | | |
| Johns 2 | Ditto | | 6t | 1981 | | 1 | 1 | | |
| Johns 3 | Ditto | | 6t | 1981 | | 1 | 1 | | |
| Johns 4 | Ditto | | 6t | 1981 | | 1 | | 1 | |
| Johns 5 | Ditto | | 6t | 1981 | | 1 | 1 | | |
| Johns 6 | Ditto | | 6t | 1981 | | 1 | | | |
| Johns 7 | Ditto | | 6t | 1981 | | 1 | 1 | | |
| Johns 8 | Ditto | | 6t | 1981 | | 1 | 1 | 1 | |
| T.C.M 1 | Fork-lift Trucks | | 13.5t | 1981 | | 1 | 1 | | |
| T.C.M 2 | Ditto | | 13.5t | 1981 | | 1 | 1 | | |
| T.C.M 3 | Ditto | | 13.5t | 1981 | | 1 | | 2 | |

Table 2.6.2.9 List of Cargo Handling Equipment (2/2)
Chabahar

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|-------------------------------|------------------|---------------------|------|----------|-----|-------------|------|-----|---------|
| | | | | year | age | Total | good | bad | |
| Balkan 1 | Fork-lift Trucks | | 3t | 1981 | | 1 | | 1 | |
| Balkan 2 | Ditto | | 3t | 1981 | | 1 | 1 | | |
| Balkan 3 | Ditto | | 3t | 1981 | | 1 | | 1 | |
| Balkan 4 | Ditto | | 3t | 1981 | | 1 | 1 | | |
| Balkan 5 | Ditto | | 3t | 1981 | | 1 | 1 | | |
| Balkan 6 | Ditto | | 3t | 1981 | | 1 | 1 | | |
| Balkan 7 | Ditto | | 3t | 1981 | | 1 | 1 | | |
| Universal No. 1 ~ No. 6 | Tractor | | | 1981 | | 6 | 5 | 1 | |
| No. 1 ~ No. 10 | Ditto | | | 1981 | | 4 | 4 | | |
| No. 11 ~ No. 12 | Ditto | | | 1981 | | 2 | 2 | | Rent |
| No. 13 ~ No. 15 | Ditto | | | 1981 | | 3 | 3 | | |
| JTM No. 1, No. 2 | Ditto | | | 1981 | | 2 | 2 | | |
| No. 1, No. 2 | Trailer | | | 1981 | | 2 | 2 | | |

Table 2.6.2.10 List of Cargo Handling Equipment (1/2)
Bushehr

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks | |
|---------|---------------|---------------------|-------|----------|------|-------------|------|-----|---------------|--|
| | | | | year | age | Total | good | bad | | |
| Link B | Mobile Cranes | | 60t | 1974 | | 1 | 1 | | | |
| Gat V | | | 60t | 1978 | | 1 | 1 | | | |
| I. H. I | | | 40t | 1992 | | 1 | 1 | | | |
| I. H. I | | | 27.5t | 1992 | | 1 | 1 | | | |
| Johns | | | 25t | 1977 | | 2 | 2 | | | |
| Johns | | | 20t | 1992 | | 1 | 1 | | | |
| Kato | | | 16t | 1992 | | 1 | 1 | | Under repair | |
| Johns | | | 12.5t | 1979 | | 1 | 1 | | | |
| Johns | | | 12.5t | 1980 | | 2 | 2 | | | |
| Johns | | | 12.5t | 1983 | | 1 | 1 | | | |
| Johns | | | 6t | 1973 | | 2 | 2 | | | |
| Johns | | | 6t | 1983 | | 2 | 2 | | | |
| T. C. M | | Fork-lift trucks | | 13.5t | 1984 | | 2 | 2 | | |
| Vacum | | | | 13.5t | 1993 | | 1 | 1 | | |
| Komatsu | | | 10t | 1981 | | 3 | 3 | | | |
| Sahand | | | 10t | 1986 | | 2 | 2 | | From Khomeini | |
| Komatsu | | | 5t | 1991 | | 2 | 2 | | | |
| Lindeh | | | 4t | 1991 | | 2 | 2 | | | |
| Sahand | | | 3t | 1979 | | 1 | | 1 | | |

Table 2.6.2.11 List of Cargo Handling Equipment (1/2)
Bushehr

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|----------|-----------------|---------------------|-------|----------|-----|-------------|------|-----|--|
| | | | | year | age | Total | good | bad | |
| Balonkar | Tractors | | 2t | 1979 | | 1 | | 1 | According to Form 6.12 13 tractors out of order |
| | | | 71H.P | 1991 | | 8 | 8 | | |
| | | | 65H.P | 1979 | | 3 | 3 | | |
| | 65H.P | | 1981 | | 4 | 4 | | | |
| | 65H.P | | 1982 | | 3 | 3 | | | |
| | Tractor Shovels | | 65H.P | 1985 | | 6 | 6 | | |
| | | | | 1991 | | 2 | 2 | | |

Table 2.6.2.12 List of Cargo Handling Equipment (1/3)
Now Shahr

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|----------|---|---------------------|---------|----------|-----|-------------|------|-----|----------------|
| | | | | year | age | Total | good | bad | |
| | Pneumatic unloader (Tyre-mounted) | | 150 t/h | | | 2 | 2 | | |
| 034 | Mobile cranes (LBH) | | 60t | 1993 | | 1 | 1 | | |
| 033 | Ditto (LBH) | | 45t | 1993 | | 1 | 1 | | |
| 029 | Ditto (J) | | 40t | 1984 | | 1 | 1 | | |
| 032 | Ditto (KT) | | 35t | 1991 | | 1 | 1 | | |
| 012, 031 | Ditto (J) | | 35t | 1972 | | 2 | 2 | | |
| 025 | Ditto (J) | | 25t | 1981 | | 1 | 1 | | |
| 030 | Ditto (J) | | 25t | 1985 | | 1 | 1 | | |
| | | | 25t | 1993 | | 4 | 4 | | Un-utilized |
| 035 | Ditto (J) | | 20t | 1993 | | 1 | 1 | | |
| 013 | Ditto (TK) | | 20t | 1974 | | 1 | 1 | | |
| 022, 023 | Ditto (J) | | 15t | 1980 | | 4 | 4 | | Rental 2 units |
| 027, 028 | Ditto (J) | | 15t | 1984 | | 2 | 2 | | |
| 024, 026 | Ditto (J) | | 12t | 1980 | | 2 | 2 | | |
| 010 | Ditto (J) | | 6t | 1972 | | 1 | | 1 | |
| 046 | Fork-lift trucks (Toyota) (Top-lifters) | | 42t | 1993 | | 1 | | 1 | Un-utilized |

Table 2.6.2.13 List of Cargo Handling Equipment (2/3)
Now Shahr

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|--------------|---------------------------|---------------------|------|----------|-----|-------------|------|-----|---------|
| | | | | year | age | Total | good | bad | |
| 031, 032 | Fork-lift trucks (TCM) | | 13t | 1984 | | 2 | 2 | | |
| 033 | (KOM) | | 10t | 1983 | | 1 | 1 | | |
| 039 | | | 10t | 1991 | | 1 | 1 | | |
| 045 | | | | 1992 | | 1 | 1 | | |
| 044 | (LINK) | | 7t | 1992 | | 1 | 1 | | |
| 038 | (TCM) | | 7t | 1991 | | 2 | 2 | | |
| 059 | (CAT) | | 5t | 1980 | | 1 | | 1 | |
| | | | 5t | 1979 | | 1 | | 1 | |
| 042, 043 | | | 4.5t | 1992 | | 2 | 2 | | |
| 040, 041 | Fork-lift trucks | | 3t | 1991 | | 2 | 2 | | |
| 011, 012 | Ditto | | 3t | 1974 | | 2 | 2 | | |
| 03 | Tractors | | | 1971 | | 1 | 1 | | |
| 08, 09 | | | | 1974 | | 2 | 2 | | |
| 013 | | | | 1979 | | 1 | 1 | | |
| 014, 015 | | | | 1981 | | 2 | 2 | | |
| 016 ~ 018 | | | | 1985 | | 3 | 3 | | |
| 019 ~ 025 | | | | 1991 | | 7 | 7 | | |

Table 2.6.2.14 List of Cargo Handling Equipment (3/3)
Now Shahr

| Name | Type | Loc. (No. of Berth) | Cap. | Procured | | No. of Equ. | | | Remarks |
|------|--------------|---------------------|------|----------|-----|-------------|------|-----|---------|
| | | | | year | age | Total | good | bad | |
| | Trailers | | 25t | 1991 | | 46 | 46 | | |
| | Trailers | | 30t | 1993 | | 4 | 4 | | |
| | <u>Total</u> | | | | | | | | |

Appendix (II)-3 Screening Sheet of Ports

Appendix II-3.1 Screening Sheet of Imam khomeini Port

| Item | Note | Judgement | |
|--|-------------------------------|---|------------------|
| Social Environment | | | |
| 1 | Resettlement | Resettlement due to land occupancy(change of the right of residence and ownership) | Yes/(No)/Unknown |
| 2 | Economic activities | Loss of land and fishing ground etc.,change of social structure | Yes/(No)/Unknown |
| 3 | Traffic and public facilities | Effect on the existing traffic such as traffic jam and accident,effects on schools and hospitals | (Yes)/No/Unknown |
| 4 | Separation of local community | Separation of local community by the traffic | Yes/(No)/Unknown |
| 5 | Cultural properties | Loss or reduction of value of cultural properties such as temples,shrines,buried cultural properties. | Yes/(No)/Unknown |
| 6 | Water rights, Right of common | Damage to fishery right,water rights,right of common,etc. | Yes/(No)/Unknown |
| 7 | Health and sanitation | Degradation of sanitary conditions due to waste and harmful insects | (Yes)/No/Unknown |
| 8 | Waste | Waste from construction site,wasted soil,solid oil,general waste,etc.. | (Yes)/No/Unknown |
| 9 | Hazards | Increase of risk such as failure of land,cave in,accident,etc. | (Yes)/No/Unknown |
| Natural Environment | | | |
| 10 | Topography and geology | Change of precious topography and geology by excavation,filling etc. | Yes/(No)/Unknown |
| 11 | Land erosion | Loss of top soil by rain after land filling or deforestation | Yes/(No)/Unknown |
| 12 | Groundwater | Loss of groundwater due to dewatering during excavation | Yes/(No)/Unknown |
| 13 | Hydrological situation | Change of water flow and river bed by reclamation or flow in of drained water | Yes/(No)/Unknown |
| 14 | Coastal zone | Erosion of coastal zone or sedimentation by reclamation or change of sea conditions | Yes/(No)/Unknown |
| 15 | Flora and fauna | Hindrance of breeding or extinction of species by changing living conditions | Yes/(No)/Unknown |
| 16 | Weather | Change of temperature,wind condition etc. by large scale land development or building | Yes/(No)/Unknown |
| 17 | Landscape | Chang of topography by land development,damage to harmony of landscape | Yes/(No)/Unknown |
| Pollution | | | |
| 18 | Air pollution | Pollution by exhaust gas from cars, ships, etc. | (Yes)/No/Unknown |
| 19 | Water pollution | Water pollution by disposed soil and industrial waste water | (Yes)/No/Unknown |
| 20 | Soil contamination | Pollution by substance from stock piles,by pesticide,etc. | (Yes)/No/Unknown |
| 21 | Noise and vibration | Generation of noise and vibration from cars,ships, etc. | Yes/(No)/Unknown |
| 22 | Subsidence of ground | Subsidence of ground due to change of ground condition or lowering groundwater level | Yes/(No)/Unknown |
| 23 | Offensive odor | Generation of exhaust gas and offensive odor from port facilities | (Yes)/No/Unknown |
| Overall judgement:Is IEE or EIA required for this development project? | | (Yes)/No | |

Appendix II-3.2 Screening Sheet of Buser Port

| Item | Note | Judgement |
|---|--|------------------|
| Social Environment | | |
| 1 | Resettlement due to land occupancy (change of the right of residence and ownership) | (Yes)/No/Unknown |
| 2 | Loss of land and fishing ground etc., change of social structure | (Yes)/No/Unknown |
| 3 | Effect on the existing traffic such as traffic jam and accident, effects on schools and hospitals | (Yes)/No/Unknown |
| 4 | Separation of local community by the traffic | Yes/(No)/Unknown |
| 5 | Loss or reduction of value of cultural properties such as temples, shrines, buried cultural properties | Yes/(No)/Unknown |
| 6 | Damage to fishery right, water rights, right of common, etc. | Yes/(No)/Unknown |
| 7 | Degradation of sanitary conditions due to waste and harmful insects | Yes/(No)/Unknown |
| 8 | Waste from construction site, wasted soil, solid oil, general waste, etc., | Yes/(No)/Unknown |
| 9 | Increase of risk such as failure of land, cave in, accident, etc. | Yes/(No)/Unknown |
| Natural Environment | | |
| 10 | Change of precious topography and geology by excavation, filling etc. | (Yes)/No/Unknown |
| 11 | Loss of top soil by rain after land filling or deforestation | Yes/(No)/Unknown |
| 12 | Loss of groundwater due to dewatering during excavation | (Yes)/No/Unknown |
| 13 | Change of water flow and river bed by reclamation or flow in of drained water | (Yes)/No/Unknown |
| 14 | Erosion of coastal zone or sedimentation by reclamation or change of sea conditions | Yes/(No)/Unknown |
| 15 | Hindrance of breeding or extinction of species by changing living conditions | (Yes)/No/Unknown |
| 16 | Change of temperature, wind condition etc. by large scale land development or building | (Yes)/No/Unknown |
| 17 | Change of topography by land development, damage to harmony of landscape | (Yes)/No/Unknown |
| Pollution | | |
| 18 | Pollution by exhaust gas from cars, ships, etc. | Yes/(No)/Unknown |
| 19 | Water pollution by disposed soil and industrial waste water | (Yes)/No/Unknown |
| 20 | Pollution by substance from stock piles, by pesticide, etc. | Yes/(No)/Unknown |
| 21 | Generation of noise and vibration from cars, ships, etc. | (Yes)/No/Unknown |
| 22 | Subsidence of ground due to change of ground condition or lowering groundwater level | Yes/(No)/Unknown |
| 23 | Generation of exhaust gas and offensive odor from port facilities | Yes/(No)/Unknown |
| Overall judgement: Is IEE or EIA required for this development project? | | (Yes)/No |

Appendix II-3.3 Screening Sheet of Bahonar in Abbas Port

| Item | Note | Judgement |
|---|--|------------------|
| Social Environment | | |
| 1 Resettlement | Resettlement due to land occupancy (change of the right of residence and ownership) | (Yes)/No/Unknown |
| 2 Economic activities | Loss of land and fishing ground etc., change of social structure | (Yes)/No/Unknown |
| 3 Traffic and public facilities | Effect on the existing traffic such as traffic jam and accident, effects on schools and hospitals | (Yes)/No/Unknown |
| 4 Separation of local community | Separation of local community by the traffic | (Yes)/No/Unknown |
| 5 Cultural properties | Loss or reduction of value of cultural properties such as temples, shrines, buried cultural properties | Yes/(No)/Unknown |
| 6 Water rights, Right of common | Damage to fishery right, water rights, right of common, etc. | (Yes)/No/Unknown |
| 7 Health and sanitation | Degradation of sanitary conditions due to waste and harmful insects | Yes/No/(Unknown) |
| 8 Waste | Waste from construction site, wasted soil, solid oil, general waste, etc., | (Yes)/No/Unknown |
| 9 Hazards | Increase of risk such as failure of land, cave in, accident, etc. | Yes/No/(Unknown) |
| Natural Environment | | |
| 10 Topography and geology | Change of precious topography and geology by excavation, filling etc. | (Yes)/No/Unknown |
| 11 Land erosion | Loss of top soil by rain after land filling or deforestation | Yes/(No)/Unknown |
| 12 Groundwater | Loss of groundwater due to dewatering during excavation | (Yes)/No/Unknown |
| 13 Hydrological situation | Change of water flow and river bed by reclamation or flow in of drained water | (Yes)/No/Unknown |
| 14 Coastal zone | Erosion of coastal zone or sedimentation by reclamation or change of sea conditions | (Yes)/No/Unknown |
| 15 Flora and fauna | Hindrance of breeding or extinction of species by changing living conditions | (Yes)/No/Unknown |
| 16 Weather | Change of temperature, wind condition etc. by large scale land development or building | Yes/(No)/Unknown |
| 17 Landscape | Change of topography by land development, damage to harmony of landscape | Yes/(No)/Unknown |
| Pollution | | |
| 18 Air pollution | Pollution by exhaust gas from cars, ships, etc. | (Yes)/No/Unknown |
| 19 Water pollution | Water pollution by disposed soil and industrial waste water | (Yes)/No/Unknown |
| 20 Soil contamination | Pollution by substance from stock piles, by pesticide, etc. | (Yes)/No/Unknown |
| 21 Noise and vibration | Generation of noise and vibration from cars, ships, etc. | Yes/(No)/Unknown |
| 22 Subsidence of ground | Subsidence of ground due to change of ground condition or lowering groundwater level | Yes/(No)/Unknown |
| 23 Offensive odor | Generation of exhaust gas and offensive odor from port facilities | Yes/(No)/Unknown |
| Overall judgement: Is IEE or EIA required for this development project? | | (Yes)/No |

Appendix II-3.4 Screening Sheet of Rajae in Abbas Port

| Item | Note | Judgement | |
|---|-------------------------------|---|------------------|
| Social Environment | | | |
| 1 | Resettlement | Resettlement due to land occupancy (change of the right of residence and ownership) | Yes/(No)/Unknow |
| 2 | Economic activities | Loss of land and fishing ground etc., change of social structure | (Yes)/No/Unknow |
| 3 | Traffic and public facilities | Effect on the existing traffic such as traffic jam and accident, effects on schools and hospitals | (Yes)/No/Unknow |
| 4 | Separation of local community | Separation of local community by the traffic | Yes/(No)/Unknow |
| 5 | Cultural properties | Loss or reduction of value of cultural properties such as temples, shrines, buried cultural properties. | Yes/(No)/Unknow |
| 6 | Water rights, Right of common | Damage to fishery right, water rights, right of common, etc. | (Yes)/No/Unknow |
| 7 | Health and sanitation | Degradation of sanitary conditions due to waste and harmful insects | Yes/No/(Unknown) |
| 8 | Waste | Waste from construction site, wasted soil, solid oil, general waste, etc., | (Yes)/No/Unknow |
| 9 | Hazards | Increase of risk such as failure of land, cave in, accident, etc. | Yes/(No)/Unknow |
| Natural Environment | | | |
| 10 | Topography and geology | Change of precious topography and geology by excavation, filling etc. | Yes/(No)/Unknow |
| 11 | Land erosion | Loss of top soil by rain after land filling or deforestation | Yes/(No)/Unknow |
| 12 | Groundwater | Loss of groundwater due to dewatering during excavation | Yes/(No)/Unknow |
| 13 | Hydrological situation | Change of water flow and river bed by reclamation or flow in of drained water | Yes/(No)/Unknow |
| 14 | Coastal zone | Erosion of coastal zone or sedimentation by reclamation or change of sea conditions | Yes/(No)/Unknow |
| 15 | Flora and fauna | Hindrance of breeding or extinction of species by changing living conditions | Yes/(No)/Unknow |
| 16 | Weather | Change of temperature, wind condition etc. by large scale land development or building | Yes/(No)/Unknow |
| 17 | Landscape | Chang of topography by land development, damage to harmony of landscape | Yes/(No)/Unknow |
| Pollution | | | |
| 18 | Air pollution | Pollution by exhaust gas from cars, ships, etc. | Yes/(No)/Unknow |
| 19 | Water pollution | Water pollution by disposed soil and industrial waste water | (Yes)/No/Unknow |
| 20 | Soil contamination | Pollution by substance from stock piles, by pesticide, etc. | Yes/(No)/Unknow |
| 21 | Noise and vibration | Generation of noise and vibration from cars, ships, etc. | Yes/(No)/Unknow |
| 22 | Subsidence of ground | Subsidence of ground due to change of ground condition or lowering groundwater level | Yes/(No)/Unknow |
| 23 | Offensive odor | Generation of exhaust gas and offensive odor from port facilities | Yes/(No)/Unknow |
| Overall judgement: Is IEE or EIA required for this development project? | | (Yes)/No | |

Appendix II-3.5 Screening Sheet of Chabahar Port

| Item | Note | Judgement |
|---|--|-----------------|
| Social Environment | | |
| 1 | Resettlement due to land occupancy (change of the right of residence and ownership) | Yes/(No)/Unknow |
| 2 | Loss of land and fishing ground etc., change of social structure | Yes/(No)/Unknow |
| 3 | Effect on the existing traffic such as traffic jam and accident, effects on schools and hospitals | (Yes)/No/Unknow |
| 4 | Separation of local community by the traffic | Yes/(No)/Unknow |
| 5 | Loss or reduction of value of cultural properties such as temples, shrines, buried cultural properties | Yes/(No)/Unknow |
| 6 | Damage to fishery right, water rights, right of common, etc. | Yes/(No)/Unknow |
| 7 | Degradation of sanitary conditions due to waste and harmful insects | Yes/No/(Unknow) |
| 8 | Waste from construction site, wasted soil, solid oil, general waste, etc., | (Yes)/No/Unknow |
| 9 | Increase of risk such as failure of land, cave in, accident, etc. | Yes/(No)/Unknow |
| Natural Environment | | |
| 10 | Change of precious topography and geology by excavation, filling etc. | Yes/(No)/Unknow |
| 11 | Loss of top soil by rain after land filling or deforestation | Yes/(No)/Unknow |
| 12 | Loss of groundwater due to dewatering during excavation | Yes/(No)/Unknow |
| 13 | Change of water flow and river bed by reclamation or flow in of drained water | Yes/(No)/Unknow |
| 14 | Erosion of coastal zone or sedimentation by reclamation or change of sea conditions | Yes/(No)/Unknow |
| 15 | Hindrance of breeding or extinction of species by changing living conditions | Yes/(No)/Unknow |
| 16 | Change of temperature, wind condition etc. by large scale land development or building | Yes/(No)/Unknow |
| 17 | Change of topography by land development, damage to harmony of landscape | (Yes)/No/Unknow |
| Pollution | | |
| 18 | Pollution by exhaust gas from cars, ships, etc. | Yes/(No)/Unknow |
| 19 | Water pollution by disposed soil and industrial waste water | (Yes)/No/Unknow |
| 20 | Pollution by substance from stock piles, by pesticide, etc. | Yes/(No)/Unknow |
| 21 | Generation of noise and vibration from cars, ships, etc. | Yes/(No)/Unknow |
| 22 | Subsidence of ground due to change of ground condition or lowering groundwater level | Yes/(No)/Unknow |
| 23 | Generation of exhaust gas and offensive odor from port facilities | Yes/(No)/Unknow |
| Overall judgement: Is IEE or EIA required for this development project? | | Yes/(No) |

Appendix II-3.6 Screening Sheet of Anzari Port

| Item | Note | Judgement |
|--|---|------------------|
| Social Environment | | |
| 1 | Resettlement due to land occupancy(change of the right of residence and ownership) | (Yes)/No/Unknown |
| 2 | Economic activities Loss of land and fishing ground etc.,change of social structure | Yes/(No)/Unknown |
| 3 | Traffic and public facilities Effect on the existing traffic such as traffic jam and accident,effects on schools and hospitals | (Yes)/No/Unknown |
| 4 | Separation of local community Separation of local community by the traffic | Yes/(No)/Unknown |
| 5 | Cultural properties Loss or reduction of value of cultural properties such as temples,shrines,buried cultural properties. | Yes/(No)/Unknown |
| 6 | Water rights, Right of common Damage to fishery right,water rights,right of common,etc. | Yes/(No)/Unknown |
| 7 | Health and sanitation Degradation of sanitary conditions due to waste and harmful insects | (Yes)/No/Unknown |
| 8 | Waste Waste from construction site,wasted soil,solid oil,general waste,etc.. | Yes/(No)/Unknown |
| 9 | Hazards Increase of risk such as failure of land,cave in,accident,etc. | (Yes)/No/Unknown |
| Natural Environment | | |
| 10 | Topography and geology Change of precious topography and geology by excavation,filling etc. | Yes/(No)/Unknown |
| 11 | Land erosion Loss of top soil by rain after land filling or deforestation | Yes/(No)/Unknown |
| 12 | Groundwater Loss of groundwater due to dewatering during excavation | Yes/(No)/Unknown |
| 13 | Hydrological situation Change of water flow and river bed by reclamation or flow in of drained water | Yes/(No)/Unknown |
| 14 | Coastal zone Erosion of coastal zone or sedimentation by reclamation or change of sea conditions | (Yes)/No/Unknown |
| 15 | Flora and fauna Hindrance of breeding or extinction of species by changing living conditions | Yes/(No)/Unknown |
| 16 | Weather Change of temperature,wind condition etc. by large scale land development or building | Yes/(No)/Unknown |
| 17 | Landscape Chang of topography by land development,damage to harmony of landscape | Yes/(No)/Unknown |
| Pollution | | |
| 18 | Air pollution Pollution by exhaust gas from cars, ships, etc. | Yes/(No)/Unknown |
| 19 | Water pollution Water pollution by disposed soil and industrial waste water | (Yes)/No/Unknown |
| 20 | Soil contamination Pollution by substance from stock piles,by pesticide,etc. | Yes/(No)/Unknown |
| 21 | Noise and vibration Generation of noise and vibration from cars,ships, etc. | (Yes)/No/Unknown |
| 22 | Subsidence of ground Subsidence of ground due to change of ground condition or lowering groundwater level | (Yes)/No/Unknown |
| 23 | Offensive odor Generation of exhaust gas and offensive odor from port facilities | Yes/No/(Unknown) |
| Overall judgement:Is IEE or EIA required for this development project? | | (Yes)/No |

Appendix II-3.7 Screening sheet of Now Shahr Port

| Item | Note | Judgement |
|---|---|------------------|
| Social Environment | | |
| 1 Resettlement | Resettlement due to land occupancy (change of the right of residence and ownership) | (Yes)/No/Unknown |
| 2 Economic activities | Loss of land and fishing ground etc., change of social structure | Yes/(No)/Unknown |
| 3 Traffic and public facilities | Effect on the existing traffic such as traffic jam and accident, effects on schools and hospitals | Yes/(No)/Unknown |
| 4 Separation of local community | Separation of local community by the traffic | Yes/(No)/Unknown |
| 5 Cultural properties | Loss or reduction of value of cultural properties such as temples, shrines, buried cultural properties. | Yes/(No)/Unknown |
| 6 Water rights, Right of common | Damage to fishery right, water rights, right of common, etc. | Yes/(No)/Unknown |
| 7 Health and sanitation | Degradation of sanitary conditions due to waste and harmful insects | Yes/(No)/Unknown |
| 8 Waste | Waste from construction site, wasted soil, solid oil, general waste, etc.. | Yes/(No)/Unknown |
| 9 Hazards | Increase of risk such as failure of land, cave in, accident, etc. | Yes/(No)/Unknown |
| Natural Environment | | |
| 10 Topography and geology | Change of precious topography and geology by excavation, filling etc. | (Yes)/No/Unknown |
| 11 Land erosion | Loss of top soil by rain after land filling or deforestation | (Yes)/No/Unknown |
| 12 Groundwater | Loss of groundwater due to dewatering during excavation | (Yes)/No/Unknown |
| 13 Hydrological situation | Change of water flow and river bed by reclamation or flow in of drained water | (Yes)/No/Unknown |
| 14 Coastal zone | Erosion of coastal zone or sedimentation by reclamation or change of sea conditions | (Yes)/No/Unknown |
| 15 Flora and fauna | Hindrance of breeding or extinction of species by changing living conditions | (Yes)/No/Unknown |
| 16 Weather | Change of temperature, wind condition etc. by large scale land development or building | Yes/(No)/Unknown |
| 17 Landscape | Change of topography by land development, damage to harmony of landscape | (Yes)/No/Unknown |
| Pollution | | |
| 18 Air pollution | Pollution by exhaust gas from cars, ships, etc. | Yes/(No)/Unknown |
| 19 Water pollution | Water pollution by disposed soil and industrial waste water | Yes/(No)/Unknown |
| 20 Soil contamination | Pollution by substance from stock piles, by pesticide, etc. | Yes/(No)/Unknown |
| 21 Noise and vibration | Generation of noise and vibration from cars, ships, etc. | (Yes)/No/Unknown |
| 22 Subsidence of ground | Subsidence of ground due to change of ground condition or lowering groundwater level | (Yes)/No/Unknown |
| 23 Offensive odor | Generation of exhaust gas and offensive odor from port facilities | Yes/(No)/Unknown |
| Overall judgement: Is IEE or EIA required for this development project? | | (Yes)/No |

Appendix (II)-4 Macro Forecast

II-4.1 Time Series Analysis

II-4.2 Correlation with Population

II-4.3 Correlation with GDP

II-4.1 Time Series Analysis

Time series analysis

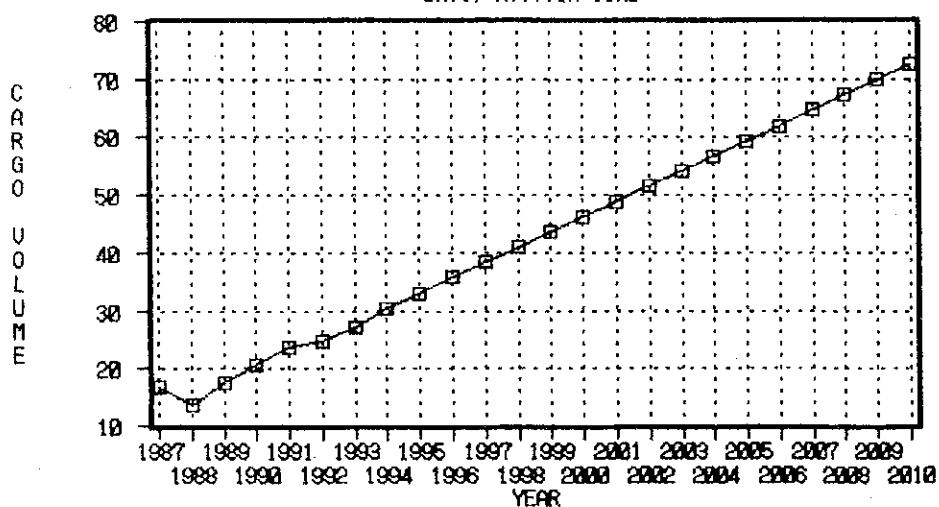
| year | Cargo Volume (1,000 tons) | Growth Rate |
|---------|------------------------------|-------------|
| 1987/88 | 16,591 | |
| 1988/89 | 13,678 | -17.56% |
| 1989/90 | 17,604 | 28.70% |
| 1990/91 | 20,646 | 17.28% |
| 1991/92 | 23,639 | 14.50% |
| 1992/93 | 24,830 | 5.04% |
| 1993/94 | 27,149 | 9.34% |
| 1994/95 | 30,460 | 12.20% |
| 1995/96 | 33,090 | 8.63% |
| 1996/97 | 35,719 | 7.95% |
| 1997/98 | 38,348 | 7.36% |
| 1998/99 | 40,978 | 6.86% |
| 1999/00 | 43,607 | 6.42% |
| 2000/01 | 46,236 | 6.03% |
| 2001/02 | 48,865 | 5.69% |
| 2002/03 | 51,495 | 5.38% |
| 2003/04 | 54,124 | 5.11% |
| 2004/05 | 56,753 | 4.86% |
| 2005/06 | 59,383 | 4.63% |
| 2006/07 | 62,012 | 4.43% |
| 2007/08 | 64,641 | 4.24% |
| 2008/09 | 67,271 | 4.07% |
| 2009/10 | 69,900 | 3.91% |
| 2010/11 | 72,529 | 3.76% |

Time series analysis

| year | Cargo Volume (1,000 tons) | | | | Total (1,000 tons) |
|---------|------------------------------|-------|--------|-------|-----------------------|
| | Import | | Export | | |
| 1987/88 | | Ratio | | Ratio | |
| 1988/89 | 12,429 | 90.9% | 1,249 | 9.1% | 13,678 |
| 1989/90 | 16,277 | 92.5% | 1,327 | 7.5% | 17,604 |
| 1990/91 | 19,303 | 93.5% | 1,343 | 6.5% | 20,646 |
| 1991/92 | 21,260 | 89.9% | 2,379 | 10.1% | 23,639 |
| 1992/93 | 21,748 | 87.6% | 3,082 | 12.4% | 24,830 |
| 1993/94 | 22,651 | 83.4% | 4,498 | 16.6% | 27,149 |
| 1994/95 | 25,893 | 85.0% | 4,568 | 15.0% | 30,460 |
| 1995/96 | 27,878 | 84.2% | 5,212 | 15.8% | 33,090 |
| 1996/97 | 29,863 | 83.6% | 5,856 | 16.4% | 35,719 |
| 1997/98 | 31,848 | 83.0% | 6,500 | 17.0% | 38,348 |
| 1998/99 | 33,833 | 82.6% | 7,144 | 17.4% | 40,978 |
| 1999/00 | 35,818 | 82.1% | 7,788 | 17.9% | 43,607 |
| 2000/01 | 37,804 | 81.8% | 8,433 | 18.2% | 46,236 |
| 2001/02 | 39,789 | 81.4% | 9,077 | 18.6% | 48,865 |
| 2002/03 | 41,774 | 81.1% | 9,721 | 18.9% | 51,495 |
| 2003/04 | 43,759 | 80.8% | 10,365 | 19.2% | 54,124 |
| 2004/05 | 45,744 | 80.6% | 11,009 | 19.4% | 56,753 |
| 2005/06 | 47,729 | 80.4% | 11,653 | 19.6% | 59,383 |
| 2006/07 | 49,714 | 80.2% | 12,298 | 19.8% | 62,012 |
| 2007/08 | 51,700 | 80.0% | 12,942 | 20.0% | 64,641 |
| 2008/09 | 53,685 | 79.8% | 13,586 | 20.2% | 67,271 |
| 2009/10 | 55,670 | 79.6% | 14,230 | 20.4% | 69,900 |
| 2010/11 | 57,655 | 79.5% | 14,874 | 20.5% | 72,529 |

Time Series Analysis

Unit: Million tons



II-4.2 Correlation with Population

Correlation with Population

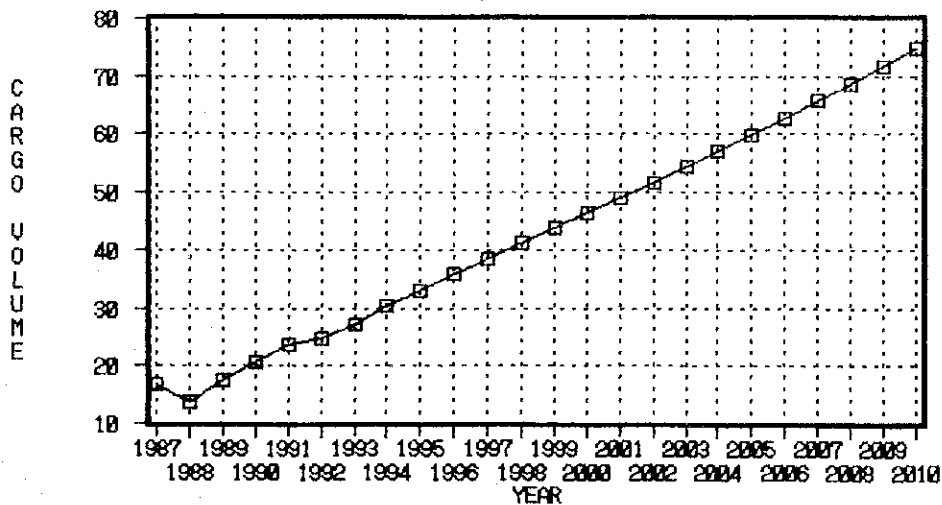
| year | Cargo Volume (1,000 tons) | | Population (1,000 persons) | |
|---------|------------------------------|-------------|-------------------------------|-------------|
| | | Growth Rate | | Growth Rate |
| 1987/88 | 16,591 | | 51,073 | |
| 1988/89 | 13,678 | -17.56% | 52,779 | 3.34% |
| 1989/90 | 17,604 | 28.70% | 54,364 | 3.00% |
| 1990/91 | 20,646 | 17.28% | 55,869 | 2.77% |
| 1991/92 | 23,639 | 14.50% | 57,234 | 2.44% |
| 1992/93 | 24,830 | 5.04% | 58,574 | 2.34% |
| 1993/94 | 27,149 | 9.34% | 59,946 | 2.34% |
| 1994/95 | 30,322 | 11.69% | 61,349 | 2.34% |
| 1995/96 | 32,986 | 8.78% | 62,786 | 2.34% |
| 1996/97 | 35,712 | 8.26% | 64,256 | 2.34% |
| 1997/98 | 38,502 | 7.81% | 65,760 | 2.34% |
| 1998/99 | 41,358 | 7.42% | 67,300 | 2.34% |
| 1999/00 | 43,854 | 6.04% | 68,646 | 2.00% |
| 2000/01 | 46,400 | 5.81% | 70,019 | 2.00% |
| 2001/02 | 48,997 | 5.60% | 71,419 | 2.00% |
| 2002/03 | 51,646 | 5.41% | 72,848 | 2.00% |
| 2003/04 | 54,347 | 5.23% | 74,305 | 2.00% |
| 2004/05 | 57,103 | 5.07% | 75,791 | 2.00% |
| 2005/06 | 59,914 | 4.92% | 77,307 | 2.00% |
| 2006/07 | 62,781 | 4.79% | 78,853 | 2.00% |
| 2007/08 | 65,706 | 4.66% | 80,430 | 2.00% |
| 2008/09 | 68,689 | 4.54% | 82,038 | 2.00% |
| 2009/10 | 71,731 | 4.43% | 83,679 | 2.00% |
| 2010/11 | 74,835 | 4.33% | 85,353 | 2.00% |

Correlation with Population

| year | Cargo Volume (1,000 tons) | | Total (1,000 tons) | Population (1,000 persons) |
|---------|------------------------------|--------|-----------------------|-------------------------------|
| | Import | Export | | |
| 1987/88 | | | | 51,073 |
| 1988/89 | 12,429 | 1,249 | 13,678 | 52,779 |
| 1989/90 | 16,277 | 1,327 | 17,604 | 54,364 |
| 1990/91 | 19,303 | 1,343 | 20,646 | 55,869 |
| 1991/92 | 21,260 | 2,379 | 23,639 | 57,234 |
| 1992/93 | 21,748 | 3,082 | 24,830 | 58,574 |
| 1993/94 | 22,651 | 4,498 | 27,149 | 59,946 |
| 1994/95 | 25,828 | 4,495 | 30,322 | 61,349 |
| 1995/96 | 27,850 | 5,136 | 32,986 | 62,786 |
| 1996/97 | 29,920 | 5,792 | 35,712 | 64,256 |
| 1997/98 | 32,039 | 6,464 | 38,502 | 65,760 |
| 1998/99 | 34,207 | 7,151 | 41,358 | 67,300 |
| 1999/00 | 36,102 | 7,752 | 43,854 | 68,646 |
| 2000/01 | 38,035 | 8,364 | 46,400 | 70,019 |
| 2001/02 | 40,007 | 8,989 | 48,997 | 71,419 |
| 2002/03 | 42,019 | 9,627 | 51,646 | 72,848 |
| 2003/04 | 44,070 | 10,277 | 54,347 | 74,305 |
| 2004/05 | 46,163 | 10,941 | 57,103 | 75,791 |
| 2005/06 | 48,297 | 11,617 | 59,914 | 77,307 |
| 2006/07 | 50,474 | 12,307 | 62,781 | 78,853 |
| 2007/08 | 52,695 | 13,011 | 65,706 | 80,430 |
| 2008/09 | 54,960 | 13,729 | 68,689 | 82,038 |
| 2009/10 | 57,270 | 14,461 | 71,731 | 83,679 |
| 2010/11 | 59,627 | 15,208 | 74,835 | 85,353 |

Correlation with Population

unit; Million tons



II-4.3 Correlation with GDP

CASE-1

Correlation with GDP

| year | Cargo Volume (1,000 tons) | | GDP (Billion IRL) | | GDP/capita (Thousand IRL) | |
|---------|------------------------------|---------|----------------------|--------|------------------------------|---------|
| 1987/88 | 16,591 | | 10,368 | | 203 | |
| 1988/89 | 13,678 | -17.56% | 9,468 | -8.68% | 179 | -11.63% |
| 1989/90 | 17,604 | 28.70% | 9,782 | 3.32% | 180 | 0.30% |
| 1990/91 | 20,646 | 17.28% | 10,930 | 11.74% | 196 | 8.73% |
| 1991/92 | 23,639 | 14.50% | 12,181 | 11.45% | 213 | 8.79% |
| 1992/93 | 24,830 | 5.04% | 12,911 | 5.99% | 220 | 3.57% |
| 1993/94 | 27,149 | 9.34% | 13,659 | 5.80% | 228 | 3.38% |
| 1994/95 | 29,985 | 10.45% | 14,549 | 6.51% | 237 | 4.08% |
| 1995/96 | 32,688 | 9.01% | 15,497 | 6.51% | 247 | 4.08% |
| 1996/97 | 35,567 | 8.81% | 16,507 | 6.51% | 257 | 4.08% |
| 1997/98 | 38,633 | 8.62% | 17,582 | 6.51% | 267 | 4.08% |
| 1998/99 | 41,899 | 8.45% | 18,727 | 6.51% | 278 | 4.08% |
| 1999/00 | 45,188 | 7.85% | 19,881 | 6.16% | 290 | 4.08% |
| 2000/01 | 48,679 | 7.73% | 21,105 | 6.16% | 301 | 4.08% |
| 2001/02 | 52,386 | 7.61% | 22,405 | 6.16% | 314 | 4.08% |
| 2002/03 | 56,321 | 7.51% | 23,785 | 6.16% | 326 | 4.08% |
| 2003/04 | 60,498 | 7.42% | 25,250 | 6.16% | 340 | 4.08% |
| 2004/05 | 64,932 | 7.33% | 26,805 | 6.16% | 354 | 4.08% |
| 2005/06 | 69,640 | 7.25% | 28,456 | 6.16% | 368 | 4.08% |
| 2006/07 | 74,638 | 7.18% | 30,208 | 6.16% | 383 | 4.08% |
| 2007/08 | 79,943 | 7.11% | 32,069 | 6.16% | 399 | 4.08% |
| 2008/09 | 85,575 | 7.05% | 34,044 | 6.16% | 415 | 4.08% |
| 2009/10 | 91,554 | 6.99% | 36,140 | 6.16% | 432 | 4.08% |
| 2010/11 | 97,901 | 6.93% | 38,366 | 6.16% | 450 | 4.08% |

CASE-2

Correlation with GDP

| year | Cargo Volume (1,000 tons) | | GDP (Billion IRL) | | GDP/capita (Thousand IRL) | |
|---------|------------------------------|---------|----------------------|--------|------------------------------|---------|
| 1987/88 | 16,591 | | 10,368 | | 203 | |
| 1988/89 | 13,678 | -17.56% | 9,468 | -8.68% | 179 | -11.63% |
| 1989/90 | 17,604 | 28.70% | 9,782 | 3.32% | 180 | 0.30% |
| 1990/91 | 20,646 | 17.28% | 10,930 | 11.74% | 196 | 8.73% |
| 1991/92 | 23,639 | 14.50% | 12,181 | 11.45% | 213 | 8.79% |
| 1992/93 | 24,830 | 5.04% | 12,911 | 5.99% | 220 | 3.57% |
| 1993/94 | 27,149 | 9.34% | 13,659 | 5.80% | 228 | 3.38% |
| 1994/95 | 29,636 | 9.16% | 14,427 | 5.62% | 235 | 3.20% |
| 1995/96 | 31,946 | 7.80% | 15,237 | 5.62% | 243 | 3.20% |
| 1996/97 | 34,386 | 7.64% | 16,093 | 5.62% | 250 | 3.20% |
| 1997/98 | 36,964 | 7.50% | 16,996 | 5.62% | 258 | 3.20% |
| 1998/99 | 39,686 | 7.36% | 17,951 | 5.62% | 267 | 3.20% |
| 1999/00 | 42,380 | 6.79% | 18,896 | 5.26% | 275 | 3.20% |
| 2000/01 | 45,217 | 6.69% | 19,891 | 5.25% | 284 | 3.20% |
| 2001/02 | 48,202 | 6.60% | 20,938 | 5.26% | 293 | 3.20% |
| 2002/03 | 51,345 | 6.52% | 22,040 | 5.26% | 303 | 3.20% |
| 2003/04 | 54,654 | 6.44% | 23,200 | 5.26% | 312 | 3.20% |
| 2004/05 | 58,136 | 6.37% | 24,421 | 5.26% | 322 | 3.20% |
| 2005/06 | 61,802 | 6.31% | 25,707 | 5.26% | 333 | 3.20% |
| 2006/07 | 65,661 | 6.24% | 27,060 | 5.26% | 343 | 3.20% |
| 2007/08 | 69,722 | 6.19% | 28,484 | 5.26% | 354 | 3.20% |
| 2008/09 | 73,998 | 6.13% | 29,984 | 5.26% | 365 | 3.20% |
| 2009/10 | 78,499 | 6.08% | 31,562 | 5.26% | 377 | 3.20% |
| 2010/11 | 83,237 | 6.04% | 33,224 | 5.26% | 389 | 3.20% |

CASE-2 Correlation with GDP

| year | Cargo Volume (1,000 tons) | | | GDP (Billion IRL) |
|---------|------------------------------|--------|--------|----------------------|
| | Import | Export | Total | |
| 1987/88 | | | 16,591 | 10,368 |
| 1988/89 | 12,429 | 1,249 | 13,678 | 9,468 |
| 1989/90 | 16,277 | 1,327 | 17,604 | 9,782 |
| 1990/91 | 19,303 | 1,343 | 20,646 | 10,930 |
| 1991/92 | 21,260 | 2,379 | 23,639 | 12,181 |
| 1992/93 | 21,748 | 3,082 | 24,830 | 12,911 |
| 1993/94 | 22,651 | 4,498 | 27,149 | 13,659 |
| 1994/95 | 25,247 | 4,388 | 29,636 | 14,427 |
| 1995/96 | 26,986 | 4,960 | 31,946 | 15,237 |
| 1996/97 | 28,821 | 5,565 | 34,386 | 16,093 |
| 1997/98 | 30,760 | 6,203 | 36,964 | 16,996 |
| 1998/99 | 32,808 | 6,877 | 39,686 | 17,951 |
| 1999/00 | 34,835 | 7,545 | 42,380 | 18,896 |
| 2000/01 | 36,969 | 8,247 | 45,217 | 19,891 |
| 2001/02 | 39,215 | 8,987 | 48,202 | 20,938 |
| 2002/03 | 41,580 | 9,765 | 51,345 | 22,040 |
| 2003/04 | 44,069 | 10,585 | 54,654 | 23,200 |
| 2004/05 | 46,689 | 11,447 | 58,136 | 24,421 |
| 2005/06 | 49,446 | 12,355 | 61,802 | 25,707 |
| 2006/07 | 52,349 | 13,311 | 65,661 | 27,060 |
| 2007/08 | 55,405 | 14,317 | 69,722 | 28,484 |
| 2008/09 | 58,622 | 15,376 | 73,998 | 29,984 |
| 2009/10 | 62,008 | 16,491 | 78,499 | 31,562 |
| 2010/11 | 65,572 | 17,665 | 83,237 | 33,224 |

CASE-3

Correlation with GDP

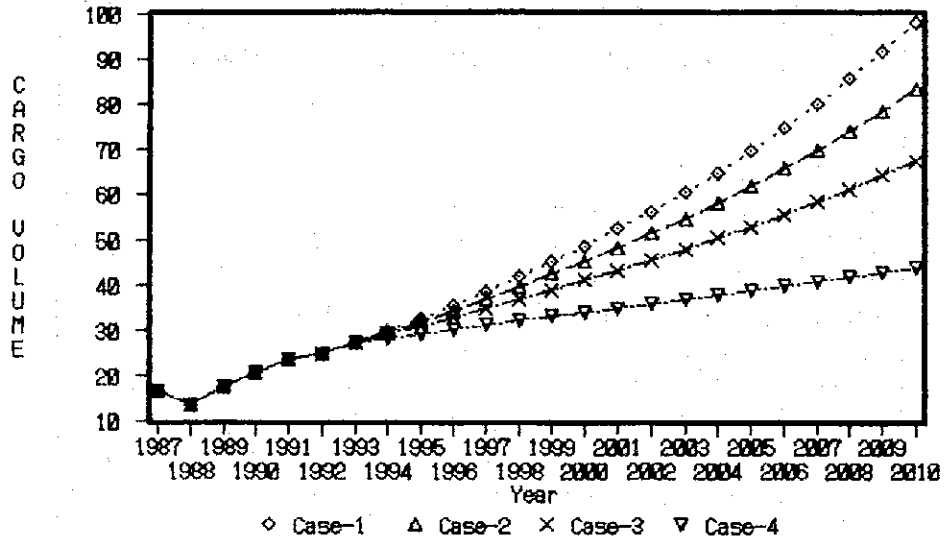
| year | Cargo Volume (1,000 tons) | | GDP (Billion IRL) | | GDP/capita (Thousand IRL) | |
|---------|------------------------------|---------|----------------------|--------|------------------------------|---------|
| 1987/88 | 16,591 | | 10,368 | | 203 | |
| 1988/89 | 13,678 | -17.56% | 9,468 | -8.68% | 179 | -11.63% |
| 1989/90 | 17,604 | 28.70% | 9,782 | 3.32% | 180 | 0.30% |
| 1990/91 | 20,646 | 17.28% | 10,930 | 11.74% | 196 | 8.73% |
| 1991/92 | 23,639 | 14.50% | 12,181 | 11.45% | 213 | 8.79% |
| 1992/93 | 24,830 | 5.04% | 12,911 | 5.99% | 220 | 3.57% |
| 1993/94 | 27,149 | 9.34% | 13,659 | 5.80% | 228 | 3.38% |
| 1994/95 | 29,197 | 7.54% | 14,273 | 4.49% | 233 | 2.10% |
| 1995/96 | 31,025 | 6.26% | 14,914 | 4.49% | 238 | 2.10% |
| 1996/97 | 32,935 | 6.16% | 15,583 | 4.49% | 243 | 2.10% |
| 1997/98 | 34,930 | 6.06% | 16,283 | 4.49% | 248 | 2.10% |
| 1998/99 | 37,015 | 5.97% | 17,014 | 4.49% | 253 | 2.10% |
| 1999/00 | 39,025 | 5.43% | 17,719 | 4.14% | 258 | 2.10% |
| 2000/01 | 41,118 | 5.36% | 18,453 | 4.14% | 264 | 2.10% |
| 2001/02 | 43,297 | 5.30% | 19,217 | 4.14% | 269 | 2.10% |
| 2002/03 | 45,567 | 5.24% | 20,013 | 4.14% | 275 | 2.10% |
| 2003/04 | 47,931 | 5.19% | 20,842 | 4.14% | 280 | 2.10% |
| 2004/05 | 50,393 | 5.14% | 21,706 | 4.14% | 286 | 2.10% |
| 2005/06 | 52,956 | 5.09% | 22,605 | 4.14% | 292 | 2.10% |
| 2006/07 | 55,626 | 5.04% | 23,541 | 4.14% | 299 | 2.10% |
| 2007/08 | 58,407 | 5.00% | 24,516 | 4.14% | 305 | 2.10% |
| 2008/09 | 61,302 | 4.96% | 25,532 | 4.14% | 311 | 2.10% |
| 2009/10 | 64,318 | 4.92% | 26,589 | 4.14% | 318 | 2.10% |
| 2010/11 | 67,458 | 4.88% | 27,690 | 4.14% | 324 | 2.10% |

CASE-4

Correlation with GDP

| year | Cargo Volume (1,000 tons) | | GDP (Billion IRL) | | GDP/capita (Thousand IRL) | |
|---------|------------------------------|---------|----------------------|--------|------------------------------|---------|
| 1987/88 | 16,591 | | 10,368 | | 203 | |
| 1988/89 | 13,678 | -17.56% | 9,468 | -8.68% | 179 | -11.63% |
| 1989/90 | 17,604 | 28.70% | 9,782 | 3.32% | 180 | 0.30% |
| 1990/91 | 20,646 | 17.28% | 10,930 | 11.74% | 196 | 8.73% |
| 1991/92 | 23,639 | 14.50% | 12,181 | 11.45% | 213 | 8.79% |
| 1992/93 | 24,830 | 5.04% | 12,911 | 5.99% | 220 | 3.57% |
| 1993/94 | 27,149 | 9.34% | 13,659 | 5.80% | 228 | 3.38% |
| 1994/95 | 28,360 | 4.46% | 13,979 | 2.34% | 228 | 0.00% |
| 1995/96 | 29,293 | 3.29% | 14,307 | 2.34% | 228 | 0.00% |
| 1996/97 | 30,249 | 3.26% | 14,642 | 2.34% | 228 | 0.00% |
| 1997/98 | 31,226 | 3.23% | 14,984 | 2.34% | 228 | 0.00% |
| 1998/99 | 32,227 | 3.20% | 15,335 | 2.34% | 228 | 0.00% |
| 1999/00 | 33,101 | 2.71% | 15,642 | 2.00% | 228 | 0.00% |
| 2000/01 | 33,993 | 2.70% | 15,955 | 2.00% | 228 | 0.00% |
| 2001/02 | 34,903 | 2.68% | 16,274 | 2.00% | 228 | 0.00% |
| 2002/03 | 35,831 | 2.66% | 16,599 | 2.00% | 228 | 0.00% |
| 2003/04 | 36,778 | 2.64% | 16,931 | 2.00% | 228 | 0.00% |
| 2004/05 | 37,744 | 2.63% | 17,270 | 2.00% | 228 | 0.00% |
| 2005/06 | 38,729 | 2.61% | 17,615 | 2.00% | 228 | 0.00% |
| 2006/07 | 39,733 | 2.59% | 17,968 | 2.00% | 228 | 0.00% |
| 2007/08 | 40,758 | 2.58% | 18,327 | 2.00% | 228 | 0.00% |
| 2008/09 | 41,803 | 2.56% | 18,694 | 2.00% | 228 | 0.00% |
| 2009/10 | 42,869 | 2.55% | 19,067 | 2.00% | 228 | 0.00% |
| 2010/11 | 43,957 | 2.54% | 19,449 | 2.00% | 228 | 0.00% |

Correlation with GDP (case-1,2,3 & 4)
Unit: Million tons



Time series, Correlation with population & GDP (case-1,2,3 & 4)

