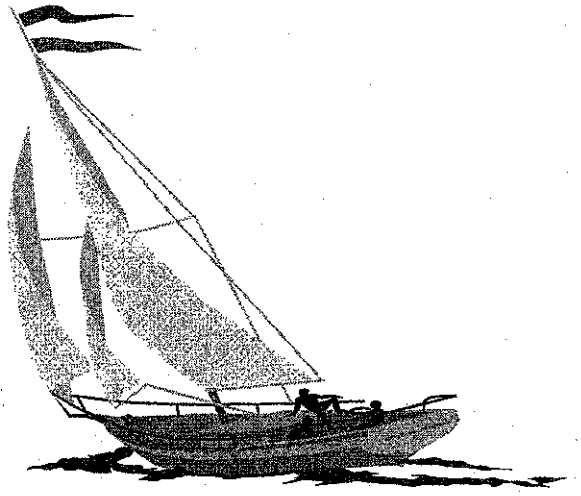
ECA/RCID/UNCTADAII/IA/01/3

UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA

THE THIRD AND FINAL EVALUATION REPORT ON THE SECOND UNITED NATIONS TRANSPORT AND COMMUNICATIONS DECADE IN AFRICA (UNTACDA II), 1991-2000

THE EVALUATION REPORT ON MARITIME SHIPPING AND PORTS SUB-SECTOR



September 2001

ECA/RCID/UNCTADA/IA/03

UNITED NATIONS
ECONOMIC COMMISSION FOR AFRICA

THE THIRD AND FINAL EVALUATION REPORT ON SECOND UNITED NATIONS TRANSPORT AND COMMUNICATIONS DECADE IN AFRICA (UNTACDA II), 1991-2000

THE EVALUATION REPORT ON MARITIME SHIPPING AND PORTS SUB-SECTOR

September 2001

CONTENTS

			Page
List of Acronyms and Abbreviations			i-ii
Executive Summary			1
Introduction			5
Chapter		*Paragraph*	*Page*
I:	Current status of maritime shipping transport/ports		7
	Maritime shipping transport	1-14	
	Ports	15-24	
II:	Status of project implementation	25-29	19
	Maritime shipping transport	30-33	
	Ports	34-38	
III:	Problems and difficulties experienced		23
	Maritime shipping transport	39	
	Ports	40	
IV:	Implementation of sub-sectoral objectives/parameters		25
	Maritime shipping transport	41-139	
	Ports	140-215	
V:	Impact of UNTACDA II		67
	Maritime shipping transport	216-223	
	Ports	224-230	

VI: Implementation of framework approved by Ministers 71

Maritime shipping transport 231-232

Ports 233-234

VII: Proposals for future action 75

Maritime shipping transport 235-236

Ports 237-238

VIII: Conclusions and recommendations 77

Maritime shipping transport 239-249

Ports 250-252

Annex *page*

I: List of reference documents 85

2: Terms of reference 86

3: Outline of modal reports 87

List of Acronyms and Abbreviations

BOT	Build on transfer
BOO	Build on own
CEMAC	Central African Economic and Monetary Community
CIF	Cost insurance and freight
COMESA	Common Market for Eastern and Southern Africa
DWT	Dead Weight Ton
EAC	East African Community
ECLAC	Economic Commission for Latin American countries
ECOWAS	Economic Community for West African States
ESLC	Ethiopian Shipping Line Corporation
EWATA	Europe/West African Trade Agreement
FOB	Free on board
GRT	Gross registered tons
IAPH	International Association of Ports and Harbours
ICD	Inland clearance Depot
ILO	International Labor organization
IMO	International Maritime Organization
ISCOS	Intergovernmental Standing Committee on Shipping
ITCP	Integrated Technical Co-operation Programme
LCL	Less than full container load
LPG	Liquidified Petroleum Gas
MOU	Memorandum Of Understanding

MOWCA	Maritime Organization of West and Central Africa
PAPC	Pan-African Association for Port Co-operation
PMAESA	Ports Management Association of Eastern and Southern Africa
PMAWCA	Ports Management Association of West and Central Africa
PTA	Preferential Trade Area
RORO	Roll-on-roll off
SADC	Southern African Development Community
SINOTASHIP	China and Tanzania shipping line
TEU	Twenty foot Equivalent Unit
UAPNA	Union des Administrations Portuaires du Nord de l'Afrique
UASC	Union of African Shippers Councils

EXECUTIVE SUMMARY

Maritime Shipping Transport

1.1 The on going process of globalization and liberalization of national economies have greatly enhanced the scope for inter- and intra-regional trade and tourism. This has created significant demands for efficient and well-integrated transport infrastructure and services to enable countries to participate in the development processes effectively. Maritime shipping transport is one of the major transport modes for carriage of inter- and intra-regional trade. More than 90 per cent of the world trade goes by sea. Therefore, the facilitation of this transport sub-sector is crucial not only to the regional economy but more so to the world economy in this era of globalization and liberalization. International trade carried by maritime shipping transport in Africa is between 92-97 per cent.

1.2. The world seaborne trade recorded its fourteenth consecutive annual increase in 1999, reaching a record high of 5.23 billion tons. Annual growth, however, declined at a rate of 1.3 per cent, the lowest since 1987. Preliminary data available indicate that global maritime trade growth in 2000 was expected to be 2.0 per cent.

1.3. The world merchant fleet expanded to 799.0 million deadweight tons (dwt) at the end of 1999, representing a 1.3 per cent increase over 1998. The relative low rate of fleet expansion reflects the balance between newbuilding deliveries of 40.5 million dwt and tonnage broken up and lost of 30.7 million dwt, leaving a net gain of 9.8 million dwt.

1.4. World total freight payments as a proportion of total imports value (the freight factor) have been following a downward trend, falling from as high as 6.64 per cent in 1980 to 5.22 per cent in 1990 and further down to 5.06 per cent in 1998. The freight factor of developed market-economy countries also declined from 4.17 per cent in 1997 to 4.07 percent in 1998.

1.5. Over the period from 1995 through 1999, the exports of Sub-Sahara African countries expanded at an average annual rate of 4.0 per cent in value and 5.1 per cent in volume. Imports increased at 6.3 per cent per year in value and 6.9 per cent in volume.

1.6. The total merchant fleet of all the sub-Saharan African countries has been decreasing in terms of dwt, from 0.29 per cent of the world total 1980 to 0.23 percent in 1990, reaching 0.15 per cent in 1999. Tanker and general cargo ships account for 46.4 per cent 29.1 per cent respectively of the total sub-Saharan fleet.

1.7. Sub-regional exports of all non-liner dry cargoes have been expanding at an average annual growth rate of 3-4 per cent over the last several years. A bout 75 per cent of the total are exported form the Southern coast. Imports have increased at the rate of 2-3 per cent annually. Nearly 60 per cent of the total imports moved through the West Coast of sub-Saharan Africa. Total liner cargo of both imports (54 per cent) and exports (46 per cent) are increasing at an annual average of 2.1 per cent, from 2.0 million TEUs in 1998 to 2.1 million in 2000.

1.8. The freight factor for developing countries increased very marginally from 8.04 per cent in 1997 to 8.06 in1998. The freight factor for the African developing countries was higher at 11. 36 percent, in 1998. The freight factor for landlocked countries of Africa in 1998 was higher at 18.08 per cent than that of all developing countries, which stood at 11.36 per cent. In West Africa, Mali and Burkina Faso had the highest freight factors at 29.57 per cent and 21.67 per cent respectively, in 1998. Rwanda registered the highest in East Africa, in 1998, at 29.91 per cent. While the highest in Southern Africa and in the region as a whole at 39.1 per cent, was Malawi.

1.9. In spite of the existence of the UNCTAD Code of Conduct for Liner Conference cargo sharing formula of 40: 40: 20, and also the fact that many coastal states are party to it, the participation of the region in shipping has not improved significantly as anticipated. Furthermore, the elimination of conferences in West Africa did more harm than good in that National lines, which were already weak, were technically eliminated from the trade due to high competition form large and well-financed foreign lines. **Therefore, there was a decline in the fleet of the region.**

1.10. The performance achieved by majority of Africa fleets in 1990/91 when the fleet level was 7.3 million dwt did not match the expectations voiced at the time they were formed. The total fleet declined over the period from 7.3 million dwt to 6.03-million dwt for1990 to 2000 respectively. That represented a decline of 17.1 per cent. The combined general cargo and container ships also decreased from 2.34 million dwt to 1.8 million dwt between 1990 and 2000 respectively. That represented a decline of 23.1 per cent. However, the container ships fleet, though very small in size, increased from 0.04 per cent in 1990 to 0.2 percent. **Indicating a decline in general cargo ships and the lack of significant fleet modernization.**

1.11. Concerning coastal shipping services, it should be further noted that there has been little change in the position since the beginning of the Decade. There was lack of co-operation between countries on this subject. Furthermore, there was lack of interest in coastal trade by shipping companies of the region except the North African lines. This explains the lack of traffic agreements between member states. However, the recent developments in West and Central Africa of setting up a Maritime fund and the move to establish ECOMARIME, if successfully implemented, may soon change the course of events in this area.

1.12. The status of project implementation was below average in the maritime shipping transport sub-sector based on the few country reports that have indicated the status of implementation of their Decade projects. However, the position might change, somewhat, if the status of implementation of all sub-regional and international organizations was taken into account.

1.13. Therefore, the way forward lies not in repeating the same recommendations for decades but identifying the reason why such a sub-sector, which is generally, known to be the backbone of movement of international and regional trade should be neglected in Africa. The main problem is the awareness of its significance and hence low priority was accorded to it. **Future actions should emphasize the following: -**

(a) Creating and enhancing awareness of the significance of maritime transport at regional, sub-regional and national level through seminars and workshops. The cost of this mode of transport should be accessed by country and then consolidated regionally. Senior decision-maker should be made aware of the implications of neglecting this sub-sector. Intergovernmental organizations may be requested to provide assistance with implementation on the organization of awareness campaigns,

(b) Carefully scrutinize the level of maritime services provided by national fleets and compare them to those in developed markets-economy countries. The aim being to determine any modifications that may be required to improve the performance of existing services,

(c) A comprehensive assessment of the needs of the region in this sub-sector should be carried out in the area of the type, regularity and speed and of service, and man power and equipment levels needed,

(d) The countries should then take measures to create a liberalized commercial environment for the development of marine transport services by introducing Anti-trust laws and regulations in the region.

Maritime Ports

2.1. Maritime shipping transport as a whole has an important interface mode in maritime ports. Africa is well endowed with ports and harbors. The region has about 80 major port/harbors and several small ones. The most notable and recommendable feature of the port sub-sector is the presence of well-organized port associations. This has given national, regional and international organizations forums and impetus for co-operation in the development of the sub-sector. The latest development, in this connection, is the establishment of a Pan-African Association for Port Co-operation (PAPC).

2.2. It is now generally accepted that old port operating concepts have to be done away with in view of the globalization and liberalization processes. A new and highly competitive business climatic condition is in place and is putting enormous pressure on transport modes and the respective interfaces such as ports. Moreover, this is a high information and technology era demanding extremely efficient port network including transport and communication systems. Port users particularly transport operators increasingly demand reliable and low-cost port services. Port authorities should, therefore, assume a comprehensive role and re-define their identities beyond the port perimeters. They should deliberately move towards satisfying the broader definition of efficiency as determined by adequate infrastructure, superstructure, modern equipment, good communication systems, skilled and market oriented management team with a keen ear to customer demands, and a well motivated port workforce.

2.3. Port productivity at berths has improved for a few major ports that started equipment modernization, restructuring and liberalization programs, from low rate average of 8 moves/hour to an average of 15 moves/hour. This has improved ship turnround times and cargo off take at those ports. On the other hand, the majority of the ports are still in the low productivity category. The reputation of the region, in this connection, has not improved due to: low output at the terminal, poor cargo off-take, high operating and maintenance costs and generally poor services to users. Such poor quality port services and their high costs are an impediment to the expansion of the region's external trade. Furthermore restructuring and liberalization measures taken by ports are expected to bare fruit within the next few years owing to the slow process of acceptance of radical change by other stakeholders like customs authorities.

2.4. Although there has been considerable investment in port infrastructure and a few modern terminal facilities in the past decade, the reputation of African ports as being notorious in the provision of low output services has not changed significantly. The handling capacity is generally poor compared to other region. The development of new facilities to meet the requirement of bulk and large unitized shipping has been slow. In many ports there is little or no competition for the provision of cargo handling and other services. At many ports, cargo is still basically handled at general conventional berths,

slowly and inefficiently. Where new infrastructure has been provided, performance is still below international standards; plant and machinery is poorly maintained; manning levels are excessive; these add to inefficiencies and high cost of handling.

2.5. The status of project implementation as per the country reports was satisfactory. The performance will be better, if the position of project implementation by all regional and international organizations were known. Taking into account the changing conditions of the Donor community and the problems encountered, the status of project implementation, in the prevailing circumstances, was therefore, satisfactory.

2.6 Therefore, **future actions** should include: -

(1) Speeding up the liberalization processes going on in the region, as this will allow the emergence of private terminal and terminal operators. This will not only provide competition but would enhance private participation and the inflow of private investment into the sub-sector,

(2) Radically moving beyond rehabilitation, refurbishment, repair and maintenance and develop new terminals to meet the demands of modern vessels,

(3) Completing and enhancing the creation of a new relationship and partnership between transport and distribution providers and users leading to the development of integrated systems.

INTRODUCTION

1.1.1. The importance of the transport and Communication Sectors in the region's development process cannot be over emphased. The significance of a strong and efficient transport infrastructure and modernization thereof is very crucial if the region was to achieve location advantage over other regions. This is important in order to attract international investment and trade to Africa in the 21st Century. This objective can be better attained if all modes of transport co-operated in a well-serviced and integrated transport system.

1.1.2. Since the time of the Industrial Revolution and beyond, maritime transport and port sub- sectors played a very important role in the movement of goods and services a cross the seas to regions of world. These two sub-sectors still play a dominant role in the whole process of movement of international trade inter- and intra- regional.

1.1.3. In Africa, the maritime shipping transport and maritime ports sub-sectors play an important role in that most of the goods needed for development projects are conveyed by Sea and through maritime ports. It is estimated that sea transport carries about 90 percent of the overall foreign commerce of Africa. In the COMESA sub-region it stands at 92 percent where as in North Africa it is about 97 percent. Therefore, no integrated trade and development can ever succeed without proper evaluation of the impact of the maritime and ports sub-sectors and according them their due dominant role.

1.1.4. The UNCTADA II project was for a ten-year period from 1991 to 2000. The evaluation relates to that period. This evaluation report covers both the maritime shipping transport and maritime port sub-sectors. The purpose of the sectoral evaluation was to access the sectoral impact of UNTACDA II in terms of the qualitative and quantitative development objectives and parameters established during the earlier phases of the Decade program.

1.15 The evaluation was undertaken at ECA, Addis Ababa. The methodology used in the evaluation of UNTACDA II projects was by: -

- Reviewing the literature available at ECA on maritime shipping transport and ports. The data and information was enough for making a general overview of the sub-sectors,

- Reviewing the project reports from African countries, sub-regional, regional and international organizations. Whereas many countries sent reports, the reports were, unfortunately, not up to the expected standards for purposes of project evaluation. No details on African Merchant marine fleets and ports were given. This made very difficult to derive the performance indicators for comparison with the perceived project parameters,

- Discussing with ECA Experts about the Decade project activities in the two sub-sectors.

1.1.6. The organization of work was based on the terms of reference attached as Annex 2. However, changes in the layout were made in the course of the evaluation taking into account the special needs of the Lead Consultant. In this connection, the description of sub-sectoral activities during the Decade period was grouped under their respective Areas of Immediate Concentration. The report has eight chapters. An attempt has been made to separate the two sub-sectors in each chapter as shown in the table of contents. The content of each chapter is also well described in the table of contents.

CHAPTER I

CURRENT STATUS OF MARITIME SHIPPING TRANSPORT AND PORTS

Maritime Shipping Transport

1. The world merchant fleet expanded to 799.0 million dead weight tons (dwt) as at the end of 1999 representing a 1.3 per cent increase over the previous year when the world fleet had expanded by 1.6 per cent from the tonnage of 1997. The relatively low rate of fleet expansion reflects the balance between newbuilding deliveries of 40.5 million dwt and tonnage broken up and lost of 30.7 million dwt, leaving a net gain of 9.8 million dwt. The tonnage of oil tankers, dry bulk carriers, general cargo ships, containerships and liquidified gas carriers increased by 1.1 per cent, 0.2 per cent, 0.2 per cent, 4.1 per cent and 5.2 per cent respectively.

Table 1

Distribution of world tonnage (dwt) by group of registration (*end of year figures*)

Flags of registration by groups of countries	Tonnage and percentage shares (In millions of dwt. Figures in *italics* are %ages of world total)					
	1980	1990	1995	1997	1998	1999
World total	682.8 *100*	658.4 *100*	734.9 *100*	775.8 *100*	788.7 *100*	799.0 *100*
Developed market-economy countries	350.1 *51.3*	219.0 *33.3*	203.9 *27.1*	202.5 *26.1*	202.6 *25.7*	203.2 *25.4*
Major open-registry countries	212.6 *31.1*	224.6 *34.1*	321.3 *43.7*	361.0 *46.5*	376.8 *47.8*	384.7 *48.1*
Developing countries	68.4 *10.0*	139.7 *21.2*	137.5 *18.7*	149.9 *19.3*	150.8 *19.1*	153.6 *19.2*
Africa	7.2 *1.1*	7.3 *1.1*	6.7 *0.9*	6.5 *0.8*	6.3 *0.8*	6.1 *0.8*

Source: compiled from various UNCTAD figures, Review of Maritime Transport 1995 to 2000 editions.

2. The share of the developed market-economy by the end of 1999 was 203 million dwt representing 25.4 per cent of the world total. Developing countries had 153.6 million dwt representing 19.2 per cent of the world total, of which Africa's share was 6.0 million dwt representing o.8 per cent of the world total. This reflected a decline over the 1980s figures, which showed African countries' share to be above 1 per cent. However, it is evident that since 1997 up to 1999, there had been a decline in tonnage owned by African countries for oil tankers, bulk carriers, general cargo ships and container ships. As a percentage of the world total, the African countries' portion stagnated since 1997. The African fleet is also notably small. This phenomenon ought to be investigated as to the reasons for this dismal showing in this sub-sector not withstanding its importance in the carriage of the sea borne commerce of the region. The whole picture is clearly shown in Table 1 and 2. Chart 1 gives a visual display of the situation.

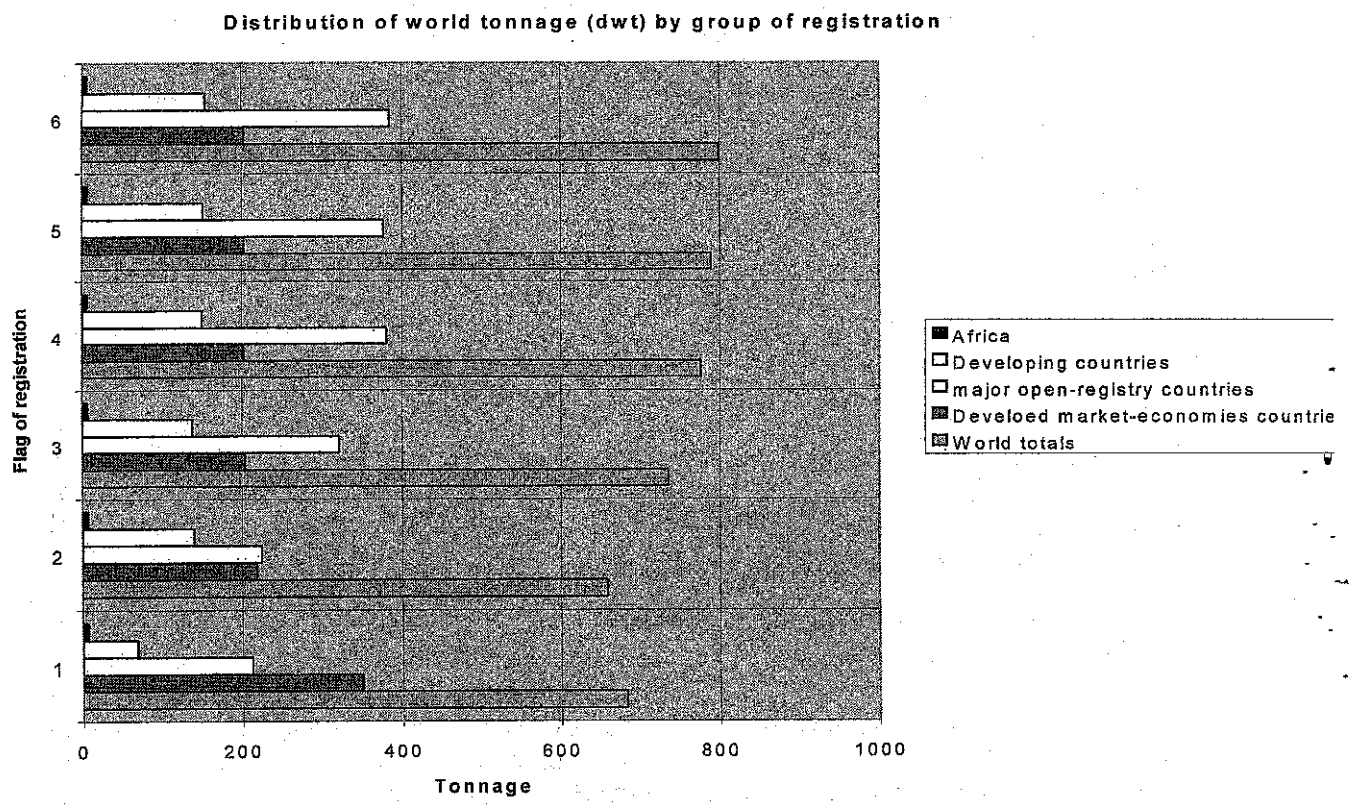
Table 2

Percentage shares of world tonnage by type of vessel in Developing countries and Africa in 1980 (as at 1 July), 1994 to 1999 (as at 31 December)

Country group	Year	Total dwt		Oil tankers	Bulk carriers	General cargo ships	Container ships	Other ships
		Million dwt	Percentage of world total	%age share of world total	%age share of world total	%age share of world total	%age share of world total	%age share of world total ships
World total	1980	682.8	100.0	49.7	27.2	17.0	1.6	4.5
	1998	788.7	100.0	35.6	34.9	13.1	7.8	8.6
	1999	799.0	100.0	35.5	34.5	13.0	8.0	9.0
Developing countries	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1998	150.8	18.9	15.9	20.1	26.7	17.3	18.5
	1999	153.6	19.2	16.2	20.1	26.5	18.8	17.5
African countries	1980	7.1	1.0	1.1	0.1	2.3	..	2.1
	1994	6.6	0.9	0.8	0.5	1.9	-	2.1
	1995	6.6	0.9	0.8	0.5	1.9	0.2	2.1
	1997	6.5	0.8	0.8	0.5	1.6	0.3	1.9
	1998	6.3	0.8	0.6	0.5	1.6	0.3	1.8
	1999	6.0	0.8	0.6	0.5	1.6	0.3	1.7

Source: compiled from various ANCTAD figures, Review of Maritime Transport 1995 to 2000 editions.

Chart 1.



3. The world fleet of fully cellular containerships continued to expand substantially in terms of both number of ships and their TEU capacity. The fleet reached 2433 ships with a total carrying capacity of 4,298,000 TEUs, in 1999. That represented an increase of 2.9 per cent in the number of ships and 5.8 per cent in TEU capacity. An important development, which would sooner or later affect Africa, is the continued increase in ship size in this category. At the end of 1999, 98 post-Panamax ships were in service. At the beginning of 2000, 56 post-Panamax ships in this category were on order. The average carrying capacity of these ships is about 5,342 TEUs. This development is aimed at achieving economies of scale for the reduction of operating costs. However, depending on the ability of the region's ports to coupe with these mega vessels, some ports will sooner or later find themselves in a situation where they are relegated to being feeder ports.

4. The developed market-economy countries percentage share of fully cellular container ships, as at the end of 1999, was 34.6 per cent whereas that of the developing countries was 18.8 per cent out of which Africa's share was 0.3 per cent.

5. In 1999, tonnage owned fell marginally by 0.3 per cent in developed market-economy countries, while major open-registry countries and developing countries increased their fleet by only 0.3 per cent and 0.1per cent respectively.

Table 3

African countries merchant fleets by flag of registration and type of ship as at January 2000

(in dwt)

	Total Fleet	Oil tankers	Bulk carriers	General cargo	Container ships	Other types
World Total	798 995 409	283 616 922	276 071 792	103 862 286	63 668 810	71 775 599
Algeria	1 110 761	52 547	288 145	295 498	..	474 571
Angola	69 697	4 523	..	48 166	..	17 008
Benin	210	..	..	..	..	210
Cameroon	5 669	..	..	298	..	5 371
Cape Verde	24 000	1 525	..	18 813	..	3 662
Comoros	1 039	..	..	1 039	..	..
Congo	600	..	..	..	..	660
Cote d'Ivoire	5 866	1 170	..	..	..	4 696
Djibouti	4 900	..	..	4 450	..	450
D. R. Congo	..	..	..	..	..	..
Egypt	2 092 569	364 688	1 035 173	543 641	17 728	131 339
Equatorial Guinea	19 350	..	..	10 271	..	9 079
Ethiopia	119 688	3 618	..	116 070	..	..
Gabon	11 631	742	..	7 096	..	3 793

Gambia	1 865	..	..	..	..	1 869
Ghana	92 076	8 600	260	17 714	..	65 502
Guinea	4 754	..	..	285	..	4 469
Guinea-Bissau	2 187	..	..	540	..	1 647
Kenya	19 096	7 631	..	1 981	..	9 484
Libya	667 090	53 832	..	91 357	..	38 901
Madagascar	45 113	16 921	..	21 432	..	6 754
Malawi	..	...	..	..	..	..
Mauritania	22 234	..	..	721	..	21 513
Mauritius	189 723	..	5 274	40 682	130 915	12 852
Morocco	383 786	20 427	..	112 061	25 205	226 093
Mozambique	25 228	..	..	12 597	..	12 631
Nigeria	677 859	519 135	..	115 313	..	43 411
Saint Helena	478	..	..	..	..	478
Sao Tome /Principe	36 250	1 753	..	28 113	1 500	4 484
Senegal	22 353	..	..	2 034	..	20 319
Seychelles	22 683	..	..	11 556	..	11 127
Sierra Leone	11 150	6 138	..	944	..	4 068
Somalia	6 756	1 528	..	4 019	..	1 209
Sudan	53 241	1 222	..	51 195	..	824
Togo	74 400	..	73 703	..	..	697
Tunisia	169 855	32 390	26 355	30 468	..	80 642
Uganda	2 743	..	..	2 743	..	..
Tanzania	36 292	7 874	..	24 566	..	3 852
Total	6 033 252	1 589 270	1 428 910	1 615 663	175 348	1 224 061

Source: Compiled from the Review of Maritime Transport, 2000, UNCTAD.

6. At the beginning of the year 2000, the age distribution of the merchant ships of the developing countries of Africa showed that most of the fleet was old and that there is need of modernizing. The average age of the African fleet was 19.47 years. Incidentally, the average ages of vessels earmarked for being sold and broken up begun from 19.0 years in 1991. Indicating that most of the region's fleet will is already due for replacement. Vessels of more than 15 years dominated the fleet at 82.7 per cent of the total African fleet as compared to 46.9 per cent of the world total. Similarly, there was a large difference in age distribution observed in individual ship types between the African

fleet and that of the World. The only exception was the average age of containerships, which was close to the world average at 10.79 years as compared with 9.72 years and 9.16 years for the world total and the developing countries respectively. Regrettably, the African container fleet is too small to make any impact on the world liner trade.

7. The combined tonnage of tankers and general cargo ships registered in African countries accounted for 53 per cent of the total African fleet. The average age of tankers and general cargo ships stood at 21.80 years and 20.71 years respectively. 98.2 percent of tankers were above 15 years old and 90.2 percent of general cargo ships were above 15 years old. The tanker tonnage of the Libya Arab Jamahiriya, Nigeria and Egypt made up 34, 33 and 23 per cent (or 90 per cent) of the African tanker fleet. The tanker tonnage over 15 years of these three countries represented over 98 per cent. Regarding general cargo ships, Egypt and Algeria share 34 per cent and 18 per cent respectively of the total African general cargo fleet. The average age of the general cargo ships registered in these two countries were 20.17 years and 21.63 years respectively. The tonnage aged 15 years and over was 87 per cent for Egypt and 96 per cent for Algeria. This profile shows a greater need for modernizing the African fleet in order to achieve operational cost advantage and overall efficiency.

Table 4

Age distribution of the merchant fleets of developing countries of Africa by type of vessel, as at January 2000. (*percentage of total dwt*)

Country grouping	Type of Vessels	Total	0-4 group	5-9 group	10-14 group	15 years and over	Average age (years)
World total	All ships	100	19.1	18.7	12.9	49.3	14.09
	Tankers	100	16.6	23.6	12.1	47.6	13.91
	Bulk carriers	100	20.8	17.0	14.6	47.6	13.83
	General cargo	100	10.9	9.9	10.2	69.0	17.32
	Container ships	100	36.1	24.9	13.3	25.7	9.72
	All others	100	18.9	13.4	13.1	54.7	14.92
Developing countries (excluding open registry countries)	All ships	100	20.3	18.5	14.4	46.9	13.75
	Tankers	100	18.6	19.4	12.1	49.9	14.16
	Bulk carriers	100	15.8	17.3	16.7	50.2	14.58
	General cargo	100	17.6	17.1	13.4	51.9	14.58
	Container ships	100	40.8	12.3	14.9	23.0	9.16
	All others	100	19.4	16.4	17.4	46.8	13.92
Africa	All ships	100	5.5	5.3	6.6	82.7	19.47
	Tankers	100	0.6	0.4	0.2	98.8	21.80
	Bulk carriers	100	15.3	14.7	2.7	67.3	16.47
	General cargo	100	1,9	2.5	5.4	90.2	20.71
	Container ships	100	18.8	0.0	74.7	6.6	10.79
	All others	100	3.3	4.9	11.1	80.7	19.50

8. Structure and ownership of world fleet: as explained earlier on, the total world merchant fleet, has been increased by 1.3 per cent over the 1998 figures. The tonnage of tankers and dry bulk carriers continued to increase in 1999 by 1.1 per cent and 0.2 per cent respectively. The two categories of ships constituted about 70 per cent of the total world fleet. General cargo ships increased in 1999 by 0.2 per cent, representing 12.7 per cent of the world total. Container ships increased in 1999 by 4.1 per cent of the world total.

9. This shows that the world is fast moving to carriage of goods in containers, particularly manufactured goods. The most interesting thing is that the highest percentage increase was not recorded in the developed market-economy countries but in the developing countries of America and Asia. The African fleet was small and, regrettably, decreased from 0.3 per cent in 1998 to 0.2 percent in 1999. If the region was expected to participate significantly in liner shipping, this is the category of ships where their efforts should have clearly been manifested. This decrease in the container fleet also means that the region is still basically carrying its trade in conventional ships and operating at conventional berths. Comparing this result to Table 4 above, the picture one gets is that the region is not moving in the direction of modernization of its fleet. The concentration of the African fleet in general cargo ships, 90 per cent of which was above 15 years in 2000, means that unless deliberate action is taken soon, the decline will continue to grow each year as older ships are taken out of service. It is a fundamental truth of shipping business that older ships cost much more to maintain than relatively new ones. With high competition, freight rates tend to decline leaving high cost operators no chance of survival. This is probably one reason why most lines in the region are in financial problems.

10. The picture looks more disappointing when assessed from the angle of merchant ships registered in sub-Saharan African countries, over selected years. Total tonnage of all sub-Saharan African countries decreased from 0.29 percent of the world total in 1980 to 0.23 percent in 1990 and reached a low level of 0.15 percent in 1999. The West African fleet is about 75 percent of the total sub-Saharan fleet. However, the total fleet of West Africa decreased from 1.1 million dwt to 0.9 million dwt in 1999. The East African fleet makes up 15.0 percent of the total sub-Saharan fleet, representing 182 000 dwt, which remained unchanged from the tonnage of 1980, albeit with large year-to-year fluctuations since then. Total tonnage of Central and Southern Africa has been steadily declining, reaching 18 000 dwt and 95 000 dwt respectively in 1999.

11. Tankers and general cargo ships accounted for 46 percent and 29.1 percent respectively of the total sub-Saharan fleets. Tanker tonnage increased very slowly but steadily from 453 000 dwt in 1990 to561 000 dwt in 1999, whilst total tonnage of general cargo ships has been shrinking constantly form 1.4 million dwt in 1980 to 0.8 million in 1990, declined further to 0.35 million in dwt in 1999. No fully cellular container ship was registered over the Decade period. While West Africa's tankers almost doubled the tonnage between 1980 to 1999, general cargo ships in dwt have plummeted from 966 000 in 1980 to only 137 000 in 1999.

12. Another dilemma facing the region is that it is not in the main line of the major sea routes. At least most part of Africa, except the North, will face problems sooner or later. As the round the world services take shape, the large part of Africa may experience down grading in routing. The major world routes are: the Asia/North America (Transpacific), Asia/Europe-Mediterranean and North America/Europe-Mediterranean (Transatlantic). Already, cargo destined for America is being taken to European ports for reshipment to America. Some cargo in Eastern Africa is being shipped to Middle East ports in order to link up with the round the world service northbound or south bound through the Suez Canal. The idea is that "hub" and "spoke" ports are determined by the needs of the round the world service. This will eventually affect the

nature of shipping to and from the region. In terms of the cost to shippers, this may turn out advantageous in that the economies of scale desired by the large shipping lines may be translated into lower freight rates. Recent experiences indicate a move in that direction. For instance, Maersk Sealand lines' freight rate from Eastern Africa to UK/Europe using the round the world service is about US $ 900 per TEU whereas normal liner rate is between US $ 1500-2000 per TEU.

13. Freight costs: Table 5 below shows the total world freight cost factor of import cargo in 1998, was 5.06 per cent of the value of imports. As expected, the cost factor for developed market-economy countries was lower at 4.07 per cent. That of the developing countries was almost double that of the developed market-economy countries at 8.06 per cent. The freight cost factor for Africa was 11.36 per cent, 6 percentage points higher than that of the world. The freight cost factor of landlocked countries of Africa stood at 13 percentage points above that of the world at 18.08 per cent. Notably, the land-based transport costs of the land locked countries are very high. Compared to ocean freight rates the ratio of land-based cost for selected countries was as shown below: -

- Malawi; through Mozambique: 1.8:1
- Niger; through Togo: 1.6:1.
- Rwanda; through Mombasa: 2.25:1
- Uganda; through Mombasa: 1.15:1
- Zambian: through South Africa: 3.5: 1

14. The problem of the landlocked countries is shown in Table 5 and 6 as well as Chart 2. The country with the highest freight factor in West Africa in 1998 was Mali at a freight factor of 29.57 per cent. In East Africa, it was Rwanda at 29.91 per cent. In Southern Africa, it was Malawi at 39.41 per cent, which also was the highest in the region. This clearly indicates the predicament of the African importer and exporter to a certain extent as he pays more for similar shipping service than his counterpart in the rest of the world. The reasons for this are: -

- Traders lack of knowledge of shipping practices,
- Lack of bargaining power to negotiate favorable rates by traders in the region who ship in relatively small liner cargo consignments,
- The volume of international trade on some routes is relatively small and imbalanced between exports and imports to provide the economies of scale obtained on routes linking the main trading centers,
- The lack of direct services in some countries in the region means that traders have had to pay for transshipment costs,
- The costs of handling in ports and delays to vessels in the region, contribute significantly to ship owners' voyage costs, prompting them to set high freight rates,
- High risks insurance premiums due to political instability and other uncertainties influence the setting of high freight rates.

Table 5

Estimates of total freight costs on imports of African countries (excluding South Africa), 1998 (*million of Us dollars).*

Year	Country group	Estimate of total freight costs of imports	Value of imports	Freight costs as percentage of import value
1998	World total	255 829.38	5 051 387	5.06
	Developing market-economy countries	154 542.61	3 794 696	4.07
	Developing countries—total	101 286.77	1 256 691	8.06
	Of which in:			
	America	25 274.34	368 251	6.86
	Asia	60 480.00	745 916	8.11
	Africa:	**12 860.53**	**113 236**	**11.36**
	North Africa	4 881.56	54 220	9.00
	West Africa	4 952.89	36 208	13.40
	Eastern Africa	1 404.31	10 797	13.01
	Southern Africa	1 028.57	6 261	16.43
	Indian Ocean	694.21	5 750	12.07
	Sub-Saharan Africa	7 978.97	59 016	13.52
	Landlocked African countries	**2 222.83**	**12 296**	**18.08**

Source: Review of Maritime Transport, 2000, UNCTAD.

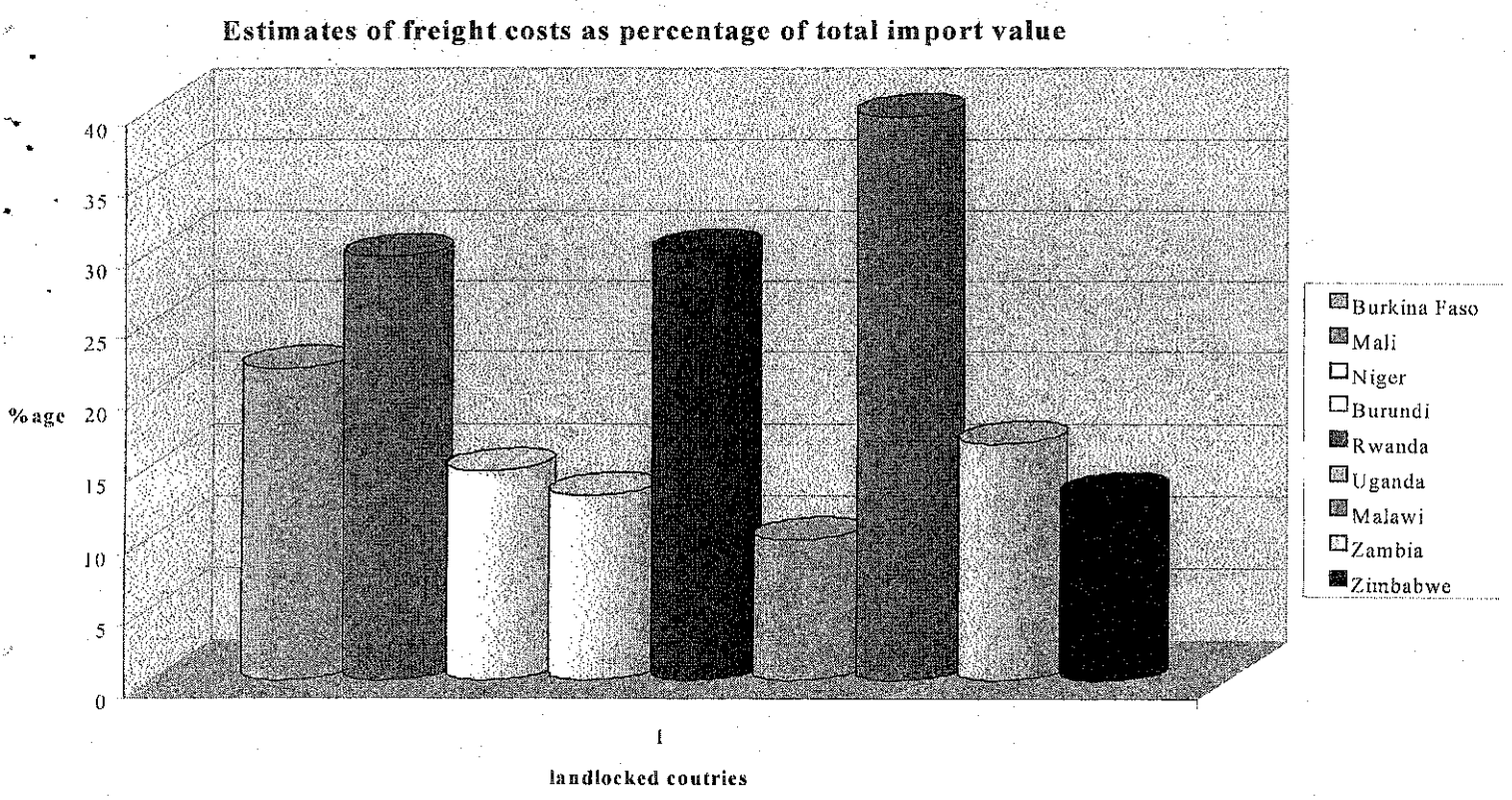
Table 6

Estimates of total freight costs of total import value in world trade by selected African landlocked countries, 1998 (*millions of US dollars*)

	Estimates of total freight costs of imports	Total imports value	Freight costs as a percentage
Burkina Faso	138.89	641	21.67
Mali	365.79	1237	29.57
Niger	91.52	630	14.53
Burundi	20.17	157	12.85
Rwanda	85.53	286	29.91
Uganda	86.88	890	9.76
Malawi	319.63	811	39.41
Zambia	183.70	1119	16.42
Zimbabwe	385.71	2971	12.85

Source: Review of Maritime Transport, 2000, UNCTAD.

Chart 2



Maritime Ports

15. Maritime ports play a vital role in the development of world trade and commerce in that more than 90 per cent of the world international trade passes through these ports. Ports are not part of the transport modes but are an important interface. Ports have an incredible impact on the totality of the factors of development in the local as well as the international economy. The amount and type of cargo passing through a port is a good indicator of the state of the economy of the country and its hinterland.

16. The World Sea borne trade recorded its fourth consecutive annual increase in 1999 reaching a record high of 5.23 billion tons. However, annual growth declined at the rate of 1.3 per cent, the lowest since 1987. Global maritime trade growth in 2000 was estimated to be in the region of 2 per cent. The total maritime activities measured in ton-miles in global trade, decreased to the minimum level of 21,480 billion ton-miles in 1999 compared to 21,492 billion ton-miles the previous years. The main causes of the annual increases were the sustainable demand in the United States of America and the recovery of the Asian economies by the end of 1999. Over the same period, the African crude oil exports decreased considerably, but dry cargo increased moderately in 1999. The percentage share of developing countries economy market was 43.8 per cent and 65.3 per cent for goods loaded and unloaded respectively. The share of developing countries was 50.6 per cent and 27.9 per cent for goods loaded and unloaded respectively, out of which, Africa's share was 9.8 per cent and 4.0 per cent for goods loaded and unloaded respectively.

17. Whereas the total figures of Africa's goods loaded and unloaded at maritime ports show a moderate increase, the performance was not same throughout the region. A result of concern over the period of review is the apparent stagnation in the total

amounts of goods loaded and unloaded in Eastern Africa ports since 1997. The total goods loaded between 1998 and 2000 almost stagnated at about 11.3 million of tons per year. Its imports also stagnated at about 27.9 million of tons per year. It is worth noting that the total trade figures are comparatively lower than other sub-regions like North and West Africa. With the exception of Mauritius, some individual ports have registered little yearly increments, less than one per cent, since 1997. Others had experienced overall declining traffic levels (see Table 7 and Chart 3).

18. The Africa region is composed of 53 countries, 39 are coastal countries (including 7 island nations) and 14 are landlocked nations. The region has a total coastline of 30 725 km. It has vast in-land waterways and river navigation, including Lake Victoria (shared by three countries), which is the second largest fresh-water lake in the world. The region is well endowed with ports/harbors. There are a bout 80 major ports /harbors in the region dotted all round the continental coastline and many other specialized port facilities for fishing, tourism, etc. The berthing facilities at each port depend on the historical developments and the nature of trade generated by the country and its hinterland. Majority of the ports have a mixture of facilities like conventional berths, container berth, oil jetty, bulk berths, etc. The largest number of port facilities is in conventional berths.

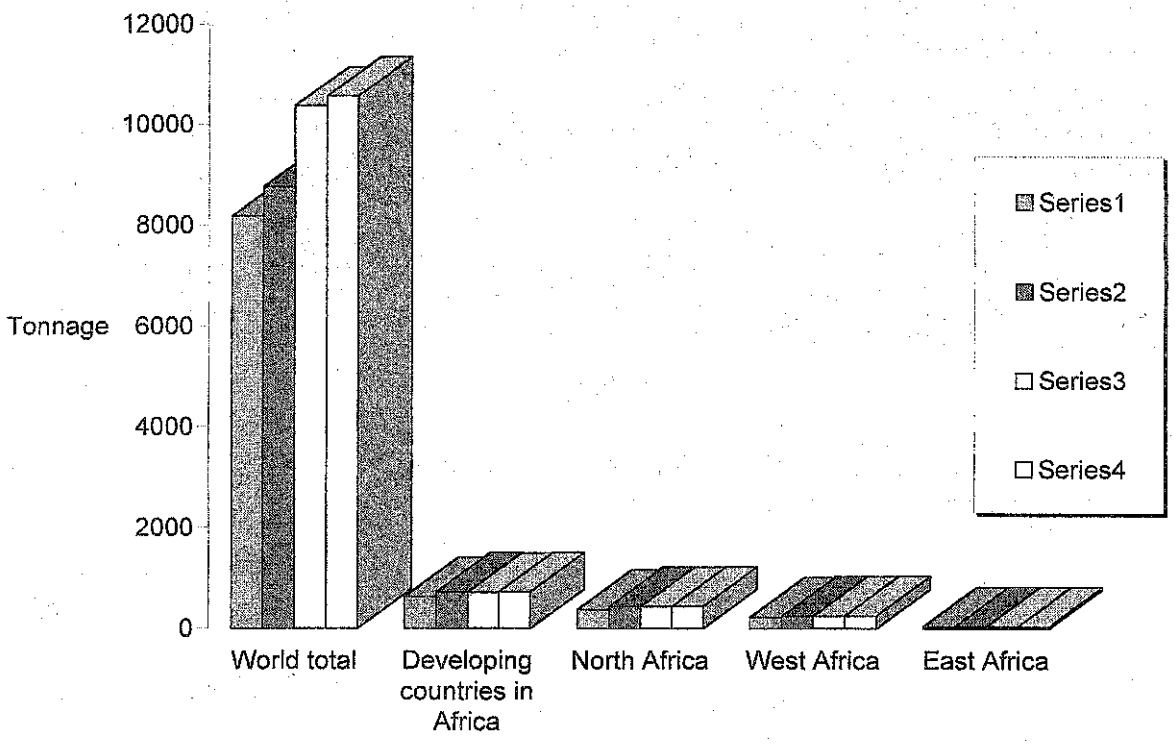
Table 7

World Seaborne trade according to geographical area (*in millions of tons*).

Area	Year	Goods loaded	Goods Unloaded	Total	%age change
World total	1990	4 007.6	4 165.9	8 173.5	-
	1998	5 064.4	5 169.4	10 233.8	25.2
	1999	5 129.1	5 236.0	10 365.1	1.3
	2000	5 230.3	5 329.6	10 559.9	1.9
Developing countries in Africa	1990	441.8	185.4	627.2	-
	1998	511.1	207.4	718.5	14.6
	1999	503.7	209.5	713.2	-0.74
	2000	514.5	211.8	726.3	1.8
North Africa	1990	246.2	125.5	371.7	-
	1998	292.8	140.0	432.8	16.4
	1999	289.1	141.2	430.3	-0.6
	2000	294.9	142.5	437.4	1.7
West /Central Africa	1990	185.7	34.9	220.6	-
	1998	207.2	39.8	247	12
	1999	203.3	40.4	243.7	-1.3
	2000	209.0	41.1	250.1	2.6
East Africa	1990	9.9	25.0	34.9	-
	1998	11.1	27.6	38.7	9.8
	1999	11.3	27.9	39.2	1.3
	2000	11.5	28.2	39.7	1.3

Source: Derived from various reports of the Review of Maritime Transport, 1990-2000, UNCTAD.

Chart 3 Seaborne trade in developing countries in Africa in million of tons,1990, 1993, 1999 to 2000



19. World container port traffic continued to expand since 1997 at the rate of 6.7 per cent. Using 1998 figures, the world container port output reached 165.0 million TEUs, of which 88.5 million was handled at the ports of developing countries representing 53 per cent of the world total throughput. The growth rate for developing countries was 12.6 per cent. During the period under review, only nine developing countries had a double-digit growth rate. Ghana, Mauritius and Morocco were the only African countries that recorded double-digit growth in container throughput of 17.6 percent, 16.6 per cent and 16.5 percent respectively. A few Africa countries recorded negative growth over the same period. For instance, Egypt, Mauritania and Re- union port throughput declined by 19.3 per cent, 4.2 per cent and 22.4 per cent respectively. Major container terminals determined by the total TEUs through put are found in South Africa, Egypt, Cote d'Ivoire, Kenya, Morocco, Nigeria, Ghana, Mauritius, Cameroon, Senegal and Tanzania as shown in Table 8.

20. Concerning productivity in ports, the position is one of a mixture of improvements and in others the status quo of low productivity exists. Some ports had improved on their productivity from 8 moves per gang hour, in 1998 to 15 moves per gang hour in 1999/2000. These include the ports of Massawa in Eritrea, Mombasa in Kenya, Mauritius, and Dar-Es-Salaam in Tanzania.(See Tables 16 and 17 as well as Chart 5). This could be attributed to the port liberalization programs going on in these countries. Also, changing trade patterns and competition between ports contributed to this high performance as well as the competitive strategies of vessel operators. The routing strategies of vessel operators had forced port authorities and terminal operators to change their attitude towards port performance. The ship operators are putting pressure to bear on port management to improve performance in order to cut costs and to provide services for new fleets of mega-vessels now being brought on stream. At the same time, port investment requirements have skyrocketed. The arrival of these mega-vessels of about 5000 TEUs and greater, is introducing the question of some ports to be transshipment hubs and others to be feeder ports. To be considered as hub, ports must have post-Panamax cranes, deep water, a large amount of back-up land and direct intermodal connections that works, like on dock rail, etc. Also the stability of the hinterland is a possible factor to be considered because of its influence on regular

cargo flows. Although some improvements have been reported, in some ports, sustainability is yet to be seen. The situation can best be summarized using the words of the Secretary General of PMAWCA in his speech given at the opening of the 22nd Annual meeting held in Dakar, Senegal, in 1998:

"As a matter of fact, reliable studies have revealed that countries that have adopted more liberal economic and industrial policies have recorded higher productivity rates than countries with restrictive and regulatory policies"

21. Several in-land container clearance depots (ICDs) had been constructed over the period under review. Some of the ICDs were constructed with the landlocked hinterland in mind and others for portal countries' own use. However, no real success story had been recorded insofar as utilization of these ICDs is concerned.

Table 8

Container traffic at selected African ports (*in TEUs*)

Country	1997	1998	%age change 1998/97	%age change 1997/96
Egypt	993 554	802 071	-19.3	9.1
Benin	49 260*	49 300	0.1	1.2
Ghana	176 375	207 500*	17.6	17.6
Morocco	210 688	245 382	16.5	-1.1
Kenya	300 000*	315 000	5.0	7.0
Mauritius	116 956	136 417	16.6	10.7
Mauritania	141 650	135 700	-4.2	5.6
Cameroon	116 578	118 238	1.4	9.8
South Africa	1 467 154	1 560 272	6.3	2.5
Senegal	110 836	115 039	3.8	12.0
Tanzania	103 433	108 363	4.8	4.6
Re-union	122 600	95 122	-22.4	-1.6

* Estimated from figures in country reports.

Source: Derived from various issues of the Review of Maritime Transport, 1990-2000, UNCTAD.

Latest developments in Maritime Ports

22. Port associations in the region have been co-operating amongst themselves in many issues of interest for many years. In recent years, they have co-operated in: -

- Adjusting to new information technologies, especially through the use of the internet,
- Sharing experiences, on important issues like advocating a commercial port outlook, commercialization and market based reforms and labor regimes, etc,

23. The above mentioned co-operation has now culminated into the formation of a confederation of port associations in the region called the Pan-African Association for Port Co-operation (PAPC), on 29th June 2001.

24. Also, in the East and Southern Africa, PMAESA, a port association comprising 18 countries in that sub-region, formed a regional/international association for purposes of developing the cruise business in the Indian Ocean seaboard called CRUISE INDIAN OCEAN, in November 2000.

CHAPTER II

STATUS OF PROJECT IMPLEMENTATION.

25. The main problem of assessing the status of implementation of the Decade program is the lack off the relevant information from the countries. Yes, they were requested to give proper data and ECA paid for it. The result is very disappointing indeed. The system of collecting project performance data was agreed at the last evaluation essentially to try and remove the anomaly, to no avail. The country reports were generally casual and highly qualitative. The majority of maritime countries did not give any substantive data and information to assist in evaluation of the Decade program. In addition, the information given in many cases was the position prevailing in 1997. The problem of lack of relevant data and information has not been solved at all in the maritime shipping and ports sub-sectors. It is probably worse now in view of the fact that a final review is taking place without relevant data and information.

26. A total of 44 countries had projects in the Decade program. 30 countries sent reports and 14 did not. Out of the 30 reports, 10 did not report according to the format. Therefore, only 20 reports could be used, in so far as data presentation is concerned, for evaluation.

27. It is obvious that few countries had maritime projects in the Decade program. Originally, there were 77 maritime projects in the Decade program. However, 4 were abandoned leaving 37 projects in maritime shipping transport and 36 in maritime ports. In fact, 7 countries had maritime shipping projects representing a total of 10 projects the rest were by sub-regional and international organizations. 5 out of 7 countries reported on the status of their projects representing 6 projects. Amongst the international organizations, only UNCTAD sent a report representing 6 maritime shipping projects out of 30 projects by organizations. In maritime ports, 14 countries had projects. 10 reported about the status 0f their projects representing 19 out of 28 total country projects. UNCTAD reported about one port project out of 9 maritime port projects by organizations.

28. Regarding the African Ministers Plan of Action of 1997, it must pointed out form the onset that Plan of Action was put in place without review of the related projects and country funding pledges. Therefore no major change in the status of implementation could be expected as a result of it since such things, as the changing conditions for getting funds from donor countries were known at the time of formulating the Plan. In the end, what one gets is only action taken by ECA and other UN bodies in conjunction with sub-regional organizations.

29. The status of implementation of projects by sector could be summarized by sub-sector as below.

Status maritime shipping transport projects

30. The maritime sub-sector had 40 projects under ANTACDA II program. 3 were abandoned leaving a total of 37 projects. As explained above, 7 countries had a total of 10 projects and one was abandoned leaving 9 projects. 5 countries reported on their maritime transport projects representing 6 projects. Sub-regional and international organizations had 30 projects in this sub-sector and two were abandoned leaving 28 projects. UNCTAD reported about its 6 (including two abandoned) projects. The rest did not report about their projects, 24 out of 28 projects. However, a few projects were completed before 1997. Therefore, the status of implementation was as summarized in the table below.

Table 9

Status of implementation of maritime shipping transport projects for the Decade program: *1991-2000*

Classification/ implementation level	By countries	By Organizations	Total	%
Completely Partially Not implemented Abandoned	4 3 2 (1)	9 nil 19 (2)	13 3 21 (3)	35.1 8.1 56.8 -
Total	9	28	37	100

Source: Compiled from current reports and 1997 evaluation data.

31. A total of 16 out of 37 projects were implemented representing 43.1 percent of the total Decade program in this sub-sector. 56.8 percent were not implemented. It must be pointed out that under this group, there are projects implemented by IMO and other organizations, which would eventually be known and taken into account. These will, somewhat, increase the total. **Considering the change in commercial environment that took place during the Decade period and based upon the number of projects implemented, the performance of this sub-sector is satisfactory.**

32. However, when the finance involved is analyzed, it would appear that major projects involving the procurement of ships and other equipment were all abandoned. What were implemented were small projects mostly involving study projects. For instance, the total cost of maritime shipping transport projects were estimated at US $ 104.04 million (excluding 3 abandoned projects) and total funds mobilized were only US $11.4 million representing only 11.0 percent of the total funding needed. In any case, the Decade ambitions as expressed in parameters 1 and 2 could not possibly have been achieved with a regional budget of a bout a hundred million US dollars. Therefore, the Decade program parameters in this sub-sector remained without the most important supporting activities. The activities reported about African shipping lines in the region were carried out, in most cases, outside the Decade program.

33. Therefore, based on the number of projects implemented, partially and completely, the status of implementation was satisfactory taking into account the economic problems in the region. Based upon the finances mobilized, the performance in maritime shipping transport was barely satisfactory due to the small scale of projects implemented. However, the position might change, somewhat, if the status of implementation of sub-regional and international organizations was fully taken into account.

Status of maritime ports projects

34. The maritime port sub-sector had 37 projects under the UNTACDA II program and 1 was abandoned leaving a total of 36 projects. 14 countries had projects in this sub-sector representing 28 projects. 10 countries reported on the status of implementation of their maritime port projects representing 19 projects. Sub-regional and international organizations had 9 projects and 1 was abandoned leaving 8 projects. 2 (including 1 abandoned) were reported on. The status of implementation can be summarized as shown below.

Table 10

Status of implementation of maritime port projects for the Decade program: *1991-2000.*

Classification/project implementation level	By countries	By organization	Total	%
Completely Partially Not implemented Abandoned	12 5 11 nil	1 nil 7 (1)	13 5 18 -	36.1 13.9 50.0 -
Total	28	8	36	100

Source: Compiled from current reports and 1997 evaluation data.

35. The figures above show that about 50 percent of the projects were implemented. There are high hopes that more sub-regional and international organizations will report on their projects and improve upon this performance. In addition, the circumstances that prevailed in the region such as reforms and restructuring militated against implementation of projects. **The sub-sector's status of project implementation, in the prevailing circumstances, was satisfactory.**

36. The total cost of projects (excluding 1 abandoned) in this sub-sector was estimated at US $ 548.88 million and funds mobilized was US $ 193.18 million representing 35.2 percent of the total cost of the projects in this sub-sector. It should also be noted that some countries with partially completed projects like Sudan did not give the cost of the work so far done. Furthermore, some countries, which had not reported like Egypt, are known to have implemented their projects such as the purchase of equipment for the port of Alexandria. **It is, therefore, concluded that the status of implementation of projects taking into account funds mobilized in this sub-sector was satisfactory.**

37. The main overall objective of UNTACDA II in this sub-sector was to increase trade efficiency by improving the performance of African ports. Due to relatively good number of partially implemented projects, the full impact of the activities undertaken under the Decade may take sometime to fully manifest.

38. The sub-sector's status of implementation was satisfactory both on account of the number of projects and the amount of funds mobilized.

CHAPTER III

PROBLEMS AND DIFFICULTIES EXPERIENCED

MARITIME SHIPPING TRANSPORT

39. The problems and difficulties experienced by countries in implementing ANTACDA II projects in this sub-sector are similar to those experienced in all other transport sub-sectors. In some cases it is almost impossible to relate problems from the countries reports to any specific sub-sector. This shows that there were problems that were common to all modes of transport. The problems experienced in Maritime transport could be summarized as follows: -

- Lack of funds: This seems to be a problem that was at the very top of the list. In this sub- sector, the funds needed were for purchase of ships and related equipment.

- Some countries have reported to have national lines operating as non-vessel operators. The growths of these lines have been hindered by unfair competition from foreign vessel owners. The vessel owners have been manipulating the slot prices at will in order to make the African fleets less competitive,

- Foreign owned shipping lines have been applying the UNCTAD Code for Liner Conferences formula of 40: 40: 20. The African fleets have not been applying the formula. Therefore, African lines have suffered from low lifting of cargo to and from the region,

- High cost of local capital due to high domestic interest rates and unavailability of cheap foreign capital to fund the projects,

- Adverse weather conditions, like the El-Nino phenomenon, led to destruction of land based transport infrastructure. Consequently, countries shifted their priorities to rehabilitating of the destroyed infrastructures at the expense of new projects,

- Countries experienced changing donor communities pre-conditions for donor funds. This in turn caused the national implementing authorities to shift their priorities for funding new projects.

MARITIME PORTS

40. The problems experienced were similar to those experienced in the maritime shipping transport sub-sector. The problems and difficulties could be summarized as follows: -

- Lack of funds: As said in the foregoing paragraphs, this problem cuts across almost all the UNTACDA II projects. This problem was more pronounced in the port sub-sector because most ports were parastatals and therefore were caught up in the problems of state and donor communities shifting pre-conditions,

- Changing trade patterns, especially in the Eastern and Southern Africa ports, have reduced the cargo throughput thereby reducing the revenue of the affected ports. The ports would ,therefore, not afford funding any new projects,

- Poor performance of the economies of most land locked countries affected ports throughput and, as a result, caused serious problems of budgeting in the affected ports.

- Political instability in the coastal as well as land locked countries had affected the implementation of not only UNTACDA II projects but also all other development activities were adversely affected,

- Adverse effects of extreme weather conditions like the El-Nino phenomenon diverted the attention of port operators from new projects to rehabilitation of port access roads, berths, equipment, etc which suffered extensive damage,

- Poor and inadequate capacity of the land based transport modes like roads, railway and inland water transport between the ports and the hinterland,

- Old port equipment facilities such as ship to show gantries (SSGs) and the cost of rehabilitation, repair, maintenance and replacement.

CHAPTER IV

IMPLEMENTATION OF SUB-SECTORAL OBJECTIVES AND PARAMETERS

MARITIME SHIPPING TRANSPORT

41. Transport services are in large part direct inputs for regional economic development and maritime transport, being the heart of the region's international trade and commerce represents one of the prime services of the regional economy. Statistical evidence shows that over 90 per cent of the regions international trade is seaborne. Goods and commodities are transported in ships, for the most part, channeled through maritime ports to markets.

42. The Africa region is composed of 53 countries, 39 are coastal countries (including 7 island nations) and 14 are landlocked nations. The region has a total coastline of 30 725 km. It has vast in land waterways and river navigation, including Lake Victoria (shared by three countries), which is the second largest fresh-water lake in the world .The region as a whole has a modest fleet with ship registries in 36 out of the 53 countries. The fleets range in magnitude from 3 vessels (744 gross tons) in the smallest registry and 1 629 vessels (54.1 million gross tons) in the largest. It is worth noting that 97 per cent of the region's tonnage is registered in Liberia. **It is estimated that the beneficially owners of about 60 per cent of open registry tonnage, like that of Liberia, are the developed market-economy countries. Incidentally, tonnage registered in Liberia in 1999 was 92 988 000 dwt and only less than 0.5 per cent could have been owned by nationals of Liberia.**

43. The total fleet of the region excluding Liberia and South Africa as at 1st January 2000 was 6.03 million dwt representing 0.8 per cent of the world total. In this connection, the maritime nations with tonnage of above 100,000 dwt are Egypt, Algeria, Nigeria, Libya Arab Jamahiriya, Morocco, Mauritius, Tunisia and Ethiopia.

44. The development of the region's fleet is shown in Table 1. In Table 11, the additional number and capacity of container vessels are reflected. The number and TEU capacity register in African countries is very small. In fact, the fleet has been declining since 1997 and in 1999 it reached a low level rate of 0.2 percent of the world fleet. This is a serious economic problem considering that in other regions this group of ships has been rising showing not only fleet modernization or innovation but also growth in manufacturing industry which normally uses containers for transportation

Table 11

Distribution of the world fleet and TEU capacity of fully cellular container ships by group of countries (*1997- 1999, end of year figures*)

Flags of registration by group of countries	Number of ships			TEU capacity and percentage shares *in Italics*		
	1997	1998	1999	1997	1998	1999
World Total	2 204	2 365	2 433	3 632 070 *100*	4 061 653 *100*	4 297 874 *100*
Developed market-economy countries	675	728	693	1 398 781 *38.5*	1 561 060 *38.4*	1 530 655 *35.6*
Major open-registry countries	800	887	944	1 315 130 *36.2*	1 545 818 *38.1*	1 698 576 *39.5*
Developing countries	504	542	587	628 999 *17.3*	691 328 *17.0*	803 135 *18.7*
Africa	8	10	10	9 117 *0.3*	11 026 *0.3*	10 719 *0.2*

Source: Review of Maritime Transport, 1997-1999, UNCTAD.

45. The long-term objective of this sector was defined in the Decade's program as, *the development of the shipping capacity of Africa by reinforcing co-operation, intensifying consultation and strengthening policy co-ordination with a view, inter alia, to achieving greater participation in international shipping activities, thus contributing significantly and positively to an accelerated economic development of African countries.*

46. In order to attain the Long-term objective, the following areas of immediate concentration were defined and the respective activities are described below.

A. Institutional building: establishment, re-organization and strengthening of maritime institutions, such as national maritime administrations, sub-regional organizations and shippers councils

47. During the period under review, the region had co-operated well in the existing maritime institutions. Establishing new maritime institutions has been rare in maritime shipping transport. However, re-organizing and strengthening has been going on in many institutions. The main activities in this area included: -

Shippers' councils

48. Many shippers' councils were established in the region during the past 20 years. A few were established during the ANTACDA II period. However, the main pre-occupation, during the Decade, was re-organization of shippers' councils. The West and Central African sub-region had been most active in this regard. Other sub- regions like Eastern and Southern Africa had achieved little in establishing shipper councils let alone the re-organization. Many seminars and workshops held in that region recommended the establishment of shippers councils but only Kenya and Tanzania did so during the period of UNTACDA II.

49. In West and Central Africa, the UASC and PMAWCA had since 1996 co-operated in programs of restructuring shippers' councils in that sub-region. The reason behind the re-organization of shippers' councils was that shippers' councils had achieved the

missions assigned to them by the governments under the conditions that prevailed at their creation. UASC, as assisted by PMAWCA forums, realized that the change in the international shipping environment required shippers' councils to redefine their objectives. A five-year period of reform was given and a monitoring committee comprising UASC and MOWCA, and the respective countries was set up in 1998. The committee's function was to ensure that restructuring of the shippers' councils took place within the perceived new goals of: -

- Promoting foreign trade;
- Defending and representing the interests of shippers across the entire transport chain concerning freight rates, surcharges and quality of services;
- Providing services to shippers, and
- Assisting shippers in transport related operations, etc.

50. The reform was to be done progressively in order to ensure that shippers' councils had the means for the proposed reforms. Also, the reforms were to take into account the specific conditions of their countries. The reason for the reform was the elimination of the conference in the early 1990s. The dilemma now is that the conference lines have returned to West and Central Africa. In the language of MOWCA, this turn of events has stupefied the shipping industry in that sub-region. The most logical step to take is to review the reforms so far done in view of this development. In other sub-regions, assistance may be considered to countries in order to establish shippers' councils.

Maritime training Institutions

51. There are 8 maritime training centers in Africa. The region's maritime training institutions are mostly under the control of ports/harbors authorities. They have therefore tended to be government owned. Co-operation and harmonization through the region's port management associations had been very effective.

52. The most successful new endeavor in the region as far as co-operation in maritime training is concerned is the PMAWCA Vocational Training Center. The Center was set up to cater for port training needs in West and Central Africa. The Center is based in Cotonou, Benin. PMAWCA members have given the center moral and financial support. Generally, all other regional centers are morally well supported by the respective port authorities. However, financial support to these institutions is weak. Many times, the host country, have been left to struggle with the cost of funding them. In this connection, MOWCA has been lamenting about this matter as follows:

"Lack of adequate financial support to the Maritime Academies and Training Institutions; Ghana and Cote D'Ivoire have been left to largely finance the two Regional Maritime Academies in Accra and Abidjan estimated at over US $ 600 000 per annum per Academy."

Regional Monitoring Units/Data Banks

53. The ports in West and Central Africa through PMAWCA set up a Port Trust Fund so that they could raise funds besides the normal Annual contributions from members. The funds were needed to finance training, development of courses and other aspects. As a result, the PMAWCA had implemented many training and other projects from the locally mobilized funds. The PMAWCA had, therefore, effectively promoted the re-organization and strengthening of institutions under it.

Port Trust Fund

54. Harmonization of port statistics has been on the agenda of ports in the region for some time. The statistical system for this project was developed by UNCTAD. In West and Central Africa, all ports supported the project along time ago. They agreed to set up national units, which could feed information to the regional one under PMAWCA. In East and Southern Africa, members of PMAESA agreed upon the port statistics project in 2000 and implementation began with immediately thereafter. The members of PMAESA also agreed to develop a data bank, which would be networked to all the member ports. Again, the problem is funding these good initiatives.

ISCOS

55. The Intergovernmental Standing committee on Shipping (ISCOS) was formed in 1967 by the governments of Kenya, Tanzania, Uganda and Zambia. ISCOS' mandate was to represent member states and shippers in negotiations with shipping lines over maritime problems like freight rates and various surcharges. Its Secretariat is based in Mombasa, Kenya.

56. It is clear that all international and regional organizations acknowledge the need for concerted action aimed at the promotion of harmonious development of the maritime transport sector at sub-regional and regional levels. At SADC level, there has been a proposal by some SADC member States to the effect that its members should consider joining ISCOS. That proposal still exists among SADC member countries. However, ISCOS had been unable to pursue the matter further because of the decision by ISCOS Council of Ministers, which was also accepted by the COMESA Council of Ministers to the effect that ISCOS should be made a specialized agency of COMESA on maritime matters.

57. Concurrently, ISCOS had a program of creating awareness of its activities with the view to inviting countries in that sub-region to join ISCOS. To that effect, two countries had shown interest and one had sent preliminary documents. However, that had to be put in abeyance in view of the developments between ISCOS and COMESA.

58. When the matter was taken up by the then Preferential Trade Area for Eastern and Southern African States (PTA) which is the predecessor to COMESA, it was agreed that its Secretariat should carry out a study to assess the possibility of extending the scope of activities of ISCOS to all the COMESA member States with a view to make it a specialized organ of COMESA

59. In 1992 the COMESA Council of Ministers decided that ISCOS be changed, expanded and transformed to make it a specialized agency of COMESA on maritime matters. The secretariats of COMESA and ISCOS were directed to work out the modalities of implementation of the transformation and identify the implications of the levy on the budget of the new ISCOS and any legal requirements.

60. In 1998 the COMESA Council of Ministers noted that the Secretariat had prepared a draft discussion paper on the program of co-operation in shipping which was circulated to the six country working group comprising shipping experts from D.R. Congo, Kenya, Seychelles, Mauritius (Chairman), Sudan and Tanzania. It requested the Secretariat to complete the task in the second half of 1998. The Council further noted the request by the Democratic Republic of Congo for a study to be undertaken by the Secretariat to expand the Intergovernmental Committee on Shipping (ISCOS) to the whole of COMESA region.

61. The ISCOS Council of Ministers endorsed all the decisions of the COMESA Council of Ministers. As a result, the secretariats of COMESA and ISCOS have been co-operating in this direction. However, the process has been too slow due to financial problems experienced by the two organizations from time to time.

62. It is also worth noting that at transit transport seminar for Eastern and Southern Africa which was organized by ECA, COMESA, PMAESA, SATCC and TTCA, it was proposed that ISCOS should be strengthened and involve private participation in its activities in order to better deal with maritime problems in the sub-region. It was resolved that ECA should look into the structure of ISCOS.

63. In addition to what has been recommended at various forums as stated above, ISCOS has been going through re-organization and one other suggestion is to restructure the organization after the MOWCA modal. In that way ISCOS would serve Eastern and Southern African sub-region just like MOWCA is serving West and Central Africa.

64. Although member countries support the organization, the problem, which is common to most sub-regional organizations, is funding. There is need for alternative funding to be found. In this connection, funding mechanism currently being implemented at MOWCA of a nominal service charge is recommended.

B. Preparation, enactment, implementation, review and updating of maritime legislation

65. Essentially, what should be the main line of consideration ought to be the preparation, enactment, implementation, review or updating and harmonization of maritime transport legislation in the region. Updating and harmonization assumes they existed as such; many regional and sub-regional organizations have made harmonization as one of their transport objective. Many seminars and workshops held in the region have highlighted in their reports the need for harmonization of transport rules and regulations. The complexity of the issues involved and lack of capacity at national level has hampered the actual implementation of the intentions in this regard.

66. The most positive action, in this connection, is the co-operation between IMO with regional organizations such as ECA, PMAESA, MOWCA, and SADC. The co-operation had led to identification of priority needs for compliance and enforcement of global standards. That culminated into the development of corresponding regional strategies such as "Strategy and Action Plan for the Protection of the Marine Environment in the Coastal Stated of Eastern and Southern Africa (SPMEESA)."In 1998, the countries in the region through co-operation with IMO came up with a consolidated regional project document comprising Integrated Technical Coordination Program (ITCP) for 2000 to 2001. In September 2000, ITPC for 2002 to 2003 was prepared. One of the projects in the ITCPs relates to training of persons in the drafting of marine legislation and incorporating them into national maritime legislation. Another aspect of the ITCP is to provide assistance in the development and strengthening of Maritime Administrations in the countries covered by the projects. This is probably the most important initiative in the area of updating and harmonizing shipping legislation in the region.

67. In the end, therefore, the matter boils down to capacity building in drafting and incorporation of the legislation into national laws and assist the region to implement them.

C. *Acceptance or ratification of international maritime conventions*

68. Generally, African countries have supported and are party to many important international maritime conventions. A close investigation shows that major maritime African countries have ratified all the important maritime conventions. The position of adoption of important maritime conventions by African countries is as shown in Table 12 below.

Table 12

International conventions ratified/acceded to by African countries

Conventions	African ratification /accessions
IMO Convention 1948	40
SOLAS Convention 1974	36
LOAD Lines Convention1966	39
TONNAGE Convention 1969	27
COLREG Convention 1972	33
STCW Convention 1978	37
SAR Convention 1979	14
INMARSAT Convention 1976	17
FACILITATION Convention 1965	17
MARPOL Annex I / II 1973/78	23
INTERVENTION Convention 1969	16
UN Convention on a Code of Conduct for Liner Conferences 1974	32
UN Convention on the Carriage of Goods by Sea (HAMBURG RULES) 1978	18
UN Convention on International Multimodal Transport of Goods 1980	6

Source: IMO Status of Conventions as at 30th March 2000 and UNCTAD Status of Conventions as at 10th July 2000

69. The number of African countries that had ratified IMO conventions looks more impressive than for UNCTAD on maritime matters. Looking at the IMO conventions, it could be naïve to suggest that all its members could ratify all its conventions. The reason is the diverse interests of the countries in the assessment of the importance of the numerous conventions. There seems to exist a pattern in the way countries ratify these conventions. This differs between regions as well as between coastal and landlocked countries. No development indicators were set for ratification of IMO conventions. However, it can be said that though a lot is still to be done in the adoption of the IMO conventions by African countries, reasonable efforts were made, in so far as major conventions are concerned. The main problem at the moment is how to meet the cost of implementing them.

70. Regarding UNCTAD Conventions on maritime matters, the most successful was the UN Convention Code of Conduct for Liner Conferences with 32 out of 78 ratification being from Africa. The Hamburg Rules followed with 18 out of 45 ratification being from Africa. The position of ratification of UNCTAD Conventions is covered under the evaluation report of multimodal transport.

71. Most seminars, workshops, and meetings of various kinds had recommended to:-

- Ratify the international conventions on transport, including those pertaining to shipping, transit traffic, and facilitation;
- Adapt and apply regional conventions;
- Implement the convention and accords for transport and transit traffic, etc.

72. These actions were accepted, in principle. And indeed some action was taken to ratify some conventions. However, adopting conventions is one thing and applying them is another. The challenge for Africa was and still is incorporating them in their respective national laws so that they could be applicable. This is an area where some African countries required technical assistance. IMO's regional initiatives, ITCPs, mentioned in the foregoing paragraphs, would go a long way towards solving that problem.

73. The expectation was that the various sub-regional maritime legislations would be harmonized and developed into a regional maritime charter. Harmonization per se is going on at various levels in the region. Ports are harmonizing their tariffs, rules and regulations through their respective ports management associations. Shipper's councils and shipper organizations are also collaborating. Countries are co-operating on many transport and transit corridor issues. Harmonization is a theme in all forums in the region.

74. Work has been done towards harmonization of many transport policies but no draft charter for maritime transport has been adopted. Towards the end of 2000, CEMAC countries were revising their merchant shipping Code with the technical assistance of IMO. The COMESA Charter in this connection is another success story in this connection.

D. Manpower development in the field of maritime transport, including support to maritime training institutions

75. Maritime training institutions are many in Africa as indicated in the foregoing paragraphs. Almost all-major ports have a maritime training college. Notably, Egypt has a Maritime Academy where training of shipping and port personnel is being carried out at international Standard. Cote D'Ivoire and Ghana each has a sub-regional Maritime Academy. West and Central Africa established a sub-regional institution called the PMAWCA Vocational Training Center, based in Cotonou, Benin. Overseas training has also been going on in various fields. National maritime colleges also exist in almost every portal country.

76. At regional level, 596 African nationals have been trained at the World Maritime University (WMU) as at September 2000 representing 44 per cent of the total WMU graduates worldwide. In addition, 83 African nationals graduated from the IMO International Maritime Law Institute (IMLI) representing 40 per cent of the IMLI graduates worldwide.

77. At sub-regional level, training of nationals has been going on throughout the UNTACDA II period. It is necessary to highlight here the activities undertaken by UNCTAD. The TRAINMAR program at the sub-regional level had gone a long way towards the development and utilization of human resources in Africa. Training sessions were held in various places in the region and overseas. Also the UNCTAD Port Management Certificate Program was successfully initiated and implemented starting from December 1996 in ports of Cotonou, Benin; Dakar, Senegal; Libreville,

Gabon; Port de Grand, Belgium. A first training-of-trainers seminar was held in Gent, Belgium, in1996 and a second one took place in Las Palmas, Spain, in 1997for representatives of these ports. In 1998, UNCTAD was extending the training extended to other port communities. Also, the success of the program led to considering the possibility of delivery of the program by national educational establishments using the new pedagogic material developed at earlier deliveries. Through this and other UNCTAD training programs, many African nationals were trained thereby contributing to human resources development in the region.

78. Besides, the three port associations undertook regional actions in this connection. Many workshops and seminars were held over the period in all the sub-regions represented by the port associations.

79. National shipping lines and port/harbors authorities undertook national programs. The most elaborate country report came from Ethiopia. The Ethiopian Shipping Lines Corporation (ESLC) had 306 seagoing and 115 shore-based permanent employees at the beginning of UNTACDA II. At the end of the Decade, ESLC had 288 seagoing and 124 shore-based permanent employees. During the period, ESLC had given training to 276 seagoing personnel, out of which 178 were trained abroad. 107 shore-based employees were also trained and 10 of them were trained abroad. It is a well-known fact that many countries had trained their nationals within and abroad. However, the country reports did not mention any thing about this matter. A few who reported merely gave it a few words coverage. The lack of supporting information and data is still a critical problem in the evaluation process.

E. Introduction of new shipping technologies for maritime development in Africa

80. As explained in the foregoing paragraphs, the African countries' fleet is relatively small and has been on the decline. To make matters worse, there has been no replacement or modernization program worth writing about. The container ship category where ship technological changes are high has also been on the decline. Therefore, no such introduction of technology was introduced through concerted action.

F. Sub-regional and regional co-operation

81. Generally, Africa as region has experienced a great zeal for regional co-operation and integration during the period under review. Many countries and organizations had created sections or divisions in their respective organizations to deal with it. Many sub-regional organizations had entered into some sort of co-operation arrangements with one another. Also, it is worth noting that many regional organizations have observer status with International organizations like IMO, UNCTAD, etc and through them, African countries co-operate on various issues including those relating to maritime matters.

82. Co-operation in port state control. The North African countries had intensified their co-operation in maritime matters through the Mediterranean Memorandum of Understanding (MOU). The Mediterranean MOU was signed in July 1997. The MOU covered co-operation in implementation of relevant IMO conventions. African countries involved included Algeria, Egypt, Morocco and Tunisia. Similarly, Eastern and Southern African countries had co-operated in maritime matters through various sub-

regional organizations. These were COMESA, SADC, EAC, ISCOS and most recently the Cruise Indian Ocean. Also, several countries in the sub-region attended a meeting in Mumbai, India on port state control. These were Djibouti, Eritrea, Ethiopia, Kenya, Tanzania, Mauritius, Mozambique, Seychelles and South Africa. The meeting culminated into an Indian Ocean MOU on port state control.

83. The West and Central countries had also intensified co-operation in maritime transport through various forums like MOWCA, ECOWAS, etc. Regarding port state control, they took a similar initiative in October 1999 when 19 countries attended the Third preparatory and signatory meeting in Abuja, Nigeria. 16 countries signed the MOU on port state control. These were: Benin, Cape Verde, Congo, Cote D'Ivoire, Gabon, Gambia, Ghana, Guinea, Liberia, Mauritania, Namibia, Nigeria, Senegal, Sierra Leone, South Africa and Togo. The remaining countries have since signed

84. Further more, the region had forged ahead in region co-operation through shipping and port associations. Co-operation between shipping lines was weak and minimal and was restricted to West and Central Africa. Shippers' councils co-operated actively through their regional organization, UASC. However, co-operation between shippers in East and South Africa was minimal due to absence of national and sub-regional shippers' councils. Regional co-operation between ports during the period under review pointed towards the creation of a Pan-African Association for Port Co-operation (PAPC).

85. Pollution and pollution control. All port associations in the region have taken a leading role in marine pollution and pollution control matters. This is, understandably, due to the fact that most of the expertise to handle marine pollution problems is concentrated in port labor and management. Most ports have small sections within the ports to handle pollution, which could be used as nucleus for the development of national pollution prevention or monitoring units. Almost all port association meetings had included a resolution to governments to ratify and implement marine pollution conventions.

86. In addition, bodies like MOWCA, SATCC, COMESA, EAC, etc have added a strong voice to their respective members to ratify and implement oil pollution and pollution control conventions. The African countries have real ecological and financial interests in matters of pollution control in the sense that coastal countries also happened to be important fishing and tourist destinations. Tourism in many of these countries highly depends on clean beaches. Moreover, these countries have invested heavily in tourist infrastructure and are keen to ensure that such investment was not made unsuccessful by pollution of their coastline. Pollution of the seawater would also destroy the ecological system of the region. This in turn would affect the production of fish in the regional waters, in the long run. Some countries in the region have invested heavily in fishing infrastructure and equipment. At the same time, the regions coastal waters provide some of the busiest shipping routes for large volumes of oil tanker traffic. The region also harbors its own oil producing countries, with a network of oil tanker movements in its coastal waters. Therefore, they are keen to see that their investment in tourism and fishing was not made ineffective by pollution of the coastal waters.

87. The commitment of IMO to safer shipping and cleaner seas on a global basis is well known. During the period under review, IMO had taken a very important step towards assisting the region to ratify and implement IMO conventions. In 1999, the organization opened regional offices in Africa to assist the countries to ratify and implement the marine pollution conventions. The IMO regional co-ordinators had carried out needs assessment missions in 28 African nations. Those missions had enabled the IMO Secretariat to identify and establish appropriate priorities for African region. Additionally, IMO had co-operated with regional organizations such as

PMAESA, MOWCA, and SADC, in identifying priority needs for compliance with and enforcement of global standards. Consequently, IMO launched regional ITCPs for the periods 2000 to 2001 and 2002 to 2003. The activities of IMO in the region would therefore concentrate on strengthening/upgrading maritime Administrations, reviewing/upgrading maritime legislation, and preventing and control of marine pollution through the provision of assistance in the ratification and implementation of MARPOL 73/78 and the OPRC convention.

88. The best individual country report on this matter came from Algeria. Algeria, in conjunction with other two Maghreb nations Morocco and Tunisia, had put in place an elaborate program of marine pollution management. They undertook a huge project on the Establishment of a Hydrocarbon Anti-pollution System. World Bank funded the project from a grant by the World Environment Fund (WEF) for a total of US $ 20 million. The amount was broken down as follows; Algeria US $ 7.4 million, Morocco US$ 6.3 million, and Tunisia US$6.3 million. The objectives of the project were to reduce the spread of oil pollution in the international waters of the Mediterranean through the establishment of structures and installations to handle waste in the ports in Algeria, Morocco and Tunisia. Also, it was meant to strengthen the capabilities of the three countries to limit dumping at sea. Three maritime traffic systems regulation stations (VTS) were installed in the ports of Algiers, Skikda and Arzew. The systems components included radar and radio-goniometry equipment VHF 2 ways, radio communication equipment as well as safety and security equipment. The trial runs and delivery of the equipment in the three ports were done in 1998.

89. The reason for quoting the example of North Africa is to show the kind of cost involved in implementation of conventions and the need for concerted action in mobilization of funds to meet the cost of implementation.

90. Most IMO conventions can be implemented more effectively on regional and sub-regional basis. For Example, the SAR Convention, adopted in Hamburg in 1979 and which entered into force in 1985, aims at developing an international SAR plan so that no matter where an accident happens, the rescue of persons in distress at sea would be co-coordinated by SAR organization. Where necessary, co-operation was expected to be between neighboring SAR organizations. The consequences of being party to SAR are that each country was expected to: -

- Develop own regulatory framework;
- Setup own share installations and,
- Run an own coast guard.

91. In view of the considerable obligations posed by the 1979 SAR Convention, it had not been accepted or ratified by many of the world's coastal states including those from the region. A revised SAR Convention entered into force on 1st January 2000. The revised SAR Convention, which to date has been ratified by 64 countries representing 47.05 percent of the world shipping tonnage, clarifies the responsibility of Governments and puts greater emphasis on the regional approach and co-ordination between maritime and aeronautical SAR operators. It is, therefore, suggested that to avoid setting up a multiplicity of SAR institutions and installations, sub-regional coast guards should be established. From this stand point lessons should be learnt from the experience of the United States Coast Guard, which is a unified coast guard for the vast American coastline. Once set up, the proposed coast guards could, amongst other things, deal with: -

- Problems related to exploitation of marine resources, security and safety; and

- Implementation of maritime related conventions and harmonization thereof. The issues involved here would be those found in SOLAS, MARPOL, ISMcode, and STCW and SAR conventions.

92. Development of coastal shipping. The need for concerted action on the development of coastal shipping services has been a matter, which has been of concern to the region for a long time.

93. The North African states have no major coastal shipping traffic problems. The sub-regional lines as well as their European neighbors' cover the area. Co-operation exists at bilateral basis between the Morocco and Tunisia Company, which serve the Mediterranean and Red Sea coasts. The Arab Maritime Company founded by Egypt and Libya serves the same area as well as individual country initiatives like that of Algeria. However, development during the Decade period had been dismal because of economic problems that had beset countries in that sub-region.

94. The East and West African sub-regions have been very keen in this area because of the apparent deficiency of coastal services operating their trade. These two sub-regions have not achieved much in this area. In Eastern Africa, COMESA carried out studies in this connection and ended at that. Ethiopia and Sudan have provided the best national initiatives through their National Shipping lines. Ethiopia Shipping Line Corporation carried 401 000 tons of general cargo in 1998 whereas the Sudan Shipping Line Company lifted 332 000 over the same period. Both lines provide services to the Eastern Africa Sub-region. The significance of these lines is that their operations are a clear indication of the existence of a nucleus fleet, which could be used for development of a sub-regional coastal shipping service.

95. West Africa in general, had experienced little or no co-operation between countries in the earlier part of the Decade, regarding this matter. During the days of relatively strong national lines, the countries could not agree to co-operation to carry coastal cargoes. Studies had been undertaken during the last decade relative to the feasibility of establishing coastal shipping lines along the West African coast. While most studies concluded that the project was feasible, their assumptions were found to be unfounded and in other cases, their methodology and approach was inadequate. This made procurement of funding difficult. It is note worthy that past attempts to develop coastal shipping services had been hampered by a series of factors including:

- Dominance of large foreign shipping lines in the region;
- Financial viability of the projects could not be proved mainly because of the dominance of the European lines in the market. Also, most funding was expected from Europe, the region with the largest fleet in the African trade;
- Lack of cohesion between the various countries that might have been served by such a service,
- Lack of political will to streamline and harmonize customs and other administrative procedures at each international frontier or port.

96. Some of these problems are now being seriously tackled through sub-region organizations and the member states in the region are steadily moving towards harmonizing and consolidating their countries' economies. The countries are also taking keen interest in the matters pertaining to trade facilitation. It is not surprising that ECOWAS is currently spearheading the establishment of a private regional coastal shipping line to be called Ecomarine. Africa Business Roundtable (ABR), MOWCA, PMAWCA and Federation of West African Chamber of Commerce are promoting the

project. The rationale for such an initiative is given credibility by the emphasis being placed on transport services along the coast between Ghana and Nigeria by way of Benin and Togo. In this connection, a business plan for establishing a coastal line was prepared and co-ordinated by MOWCA. Furthermore, a Project Secretariat was established and located at Lagos, Nigeria. The Project Secretariat has been charged with the functions of:

- Identifying and registering all existing providers of coastal shipping services and to extend technical assistance to them in order to enable them render more efficient services;

- Setting up a sub-region committee of experts to negotiate and to put in place special berths, special tariffs, harmonized facilitation procedures and conditions for coastal shipping services in MOWCA ports. Special facilitation committees for coastal shipping services would be set up in each MOWCA port to assist the sub-region in creating the enabling conditions for coastal shipping to thrive;

- Organizing fora to attract private sector investment in the supply of coastal shipping service and to assist existing operators in acquiring capacity for improved services;

- Creating awareness through the publication of commercial material/brochures on coastal the coastal shipping services for the perusal of existing operators and potential investors and to generate demand for the service in the sub-region;

- Identifying and approaching interested foreign shipping companies for possible joint venture projects such as transshipment of cargoes within the sub-region, and

- Encouraging investors to float their companies and seek quotations at the Stock Exchange.

97. The West and Central African initiative is the best hope, so far, for a coastal shipping service to serve intra-African trade.

98. Tables 3, shows that African countries have tonnage in the "General cargo ships " and "Other types" categories. Most of these ships are small. They are in the range of 400 to 600 grt. It is this group of ships, which can be used for small-scale coastal shipping services. In Developing countries as a whole, this group of ships showed an increase over the 1980s, from 17.6 per cent to 26.5 per cent of the world total for general cargo ships and other types respectively. However, the African group showed a decline in tonnage of both categories over the same period. What it entails is that apart from establishing new lines development of this service should include use of the same existing small ships but with greater efficiency and co-operation between existing shipping lines operating coastal services. By so doing, tonnage available would be increased without necessarily adding new tonnage.

99. Statistics show that 36 out of 53 African countries have ships on their registries. Majority of them did not indicate in their country reports about maritime fleets probably because they considered them insignificant. Other countries just mentioned them in passing without giving important information like the fleet performance, number and type of ships, routes they ply on, etc.

100. A close look at the statistical tables shows that few countries purchased new tonnage over the period under review. Very few countries reported in some detail the activities of the lines for a meaningful analysis of their fleet to make. The ships on registry are small and would include leisure and fishing boats. The best course of

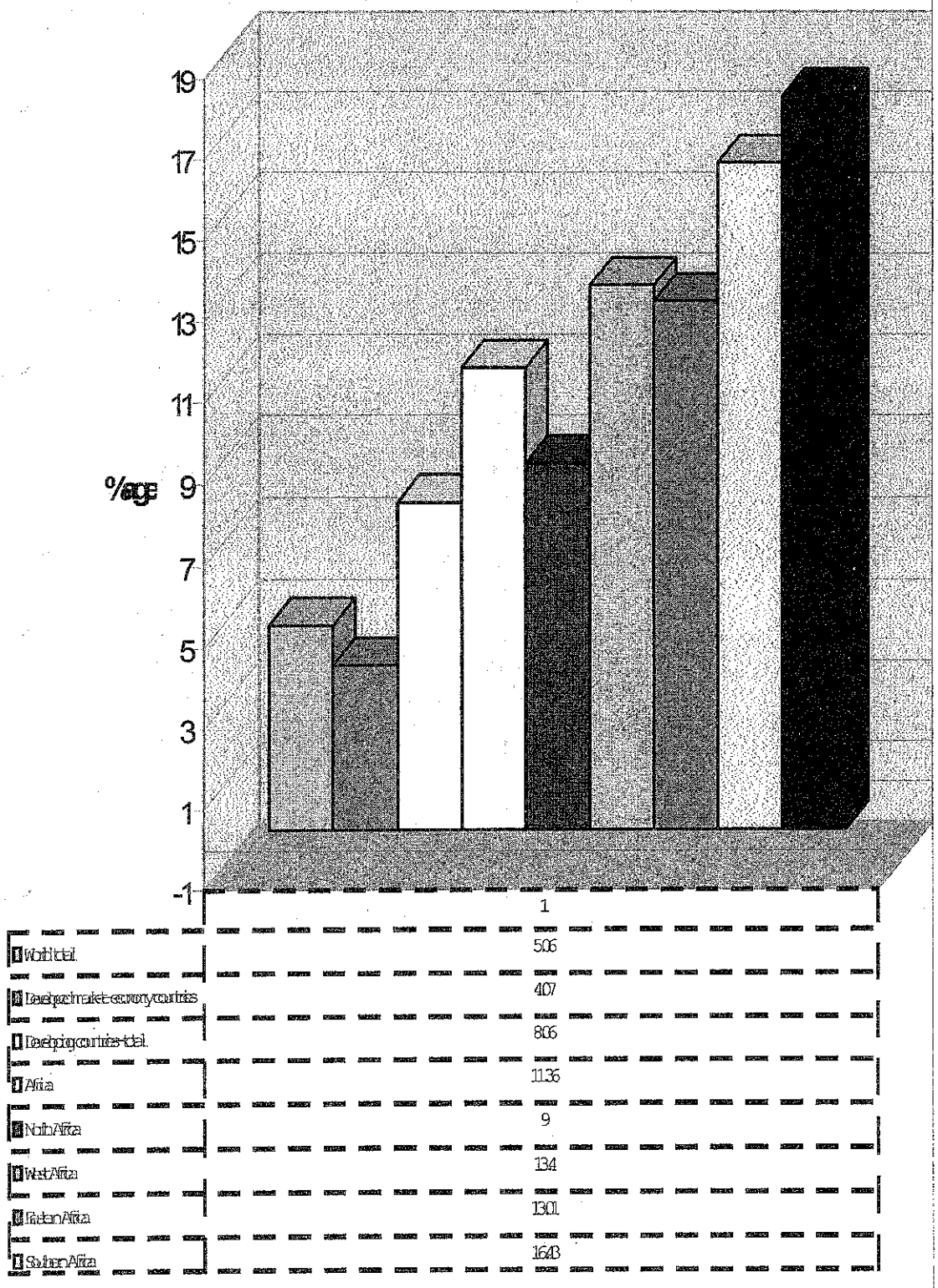
action would, therefore, be to investigate in detail the structure and capability of these vessels and then decide whether or not it would be possible to use the existing lines.

101. Reducing cost of shipping transport. The essence of the development of any mode of transport should at some point or another includes the reduction in the cost of providing it in so far as the end user is concerned. In the maritime sector, competition between operators is very stiff in the area of quality, frequency and cost of service. In the African context, the main area of concern has been the cost of service. It is very rare to find complaints of poor deep-sea services on a route served by liner operators. This could be partly due to lack of knowledge of shipping and in some instances just mere indifference, which is quite often in the region.

102. As indicated in the foregoing chapters, most African countries do not have own large fleets plying the deep-sea or coastal waters. They depend on foreign bottoms to provide shipping services. Consequently, they have very little influence on the kind of service and the cost of it. This has been recognized at global, regional, sub-regional and at national levels. At global level, efforts have been made by donor countries, United Nations systems and multilateral financial and development institutions to provide assistance in the form of grants or concessions loans for improvement of transport, interface, storage and other transport related facilities. All this has been done in order to, amongst other things; reduce the cost of overall transport to the countries. The worst affected in this regard are land locked countries of Africa, who, incidentally, happened to be among the poorest in the world. In this connection, ECA, UNCTAD, sub-regional ports management associations, transit transport corridors, UASC, ECOWAS, COMESA, EAC, SADC, ISCOS, and other regional and international organizations had made efforts to support improvements in transport services with the aim of reducing its costs. Similar actions had been taken at national levels.

103. In spite of these efforts, there is a general understanding that greater work is still required at all levels to reduce transport costs generally and in maritime shipping transport in particular. Tables 5, 6 and 13 as well as Chart 4 shows the estimated freight costs by region over the period under review. The world total freight payments as a proportion of import value had been on the downward trend from as high as 5.40 per cent in 1990 to 5.06 percent in 1998. Developed market-economy countries also experienced a downward trend over the same period. Their freight costs proportions declined from 4.54 per cent in 1993 to 4.07 percent in 1998.

Chart 4: Estimates of percentage freight costs on imports of Africa (excluding South Africa), 1998



- World total
- Developed market economy countries
- Developing countries-total
- Africa
- North Africa
- West Africa
- Eastern Africa
- Southern Africa
- Landlocked Africa countries

Table 13

Estimates of total freight costs of total import value *(total freight costs as a percentage of import value)*

Area	1990	1993	1995	1997	1998
World	5.22	5.59	5.27	5.24	5.06
Developed market-economy countries	4.40	4.54	4.20	4.17	4.07
Developing countries---------- Total	8.59	8.33	8.30	8.04	8.06
Africa	11.05	11.06	11.44	11.53	11.36
America	8.17	7.98	7.89	7.62	6.86
Asia	8.19	8.03	8.03	7.95	8.11
Europe	8.84	8.54	8.45	8.39	8.46
Oceania	12.26	12.23	12.39	12.36	12.26

Source: Review of Maritime Transport, 1990-2000, UNCTAD.

104. The level of freight costs incurred in the import trades of developing countries had continued to be about half of that of developed market-economies countries. The difference between the two is mainly attributable to differences in trade pattern, national and regional infrastructure facilities and distribution systems, and larger concessions given to shippers in developed market-economy countries by shipping/conference lines for larger volumes of cargo.

105. The over all ratios of freight charges of developing countries declined over the same period from 1993 to 1997 and increased in 1998. Within the developing countries group, Africa showed an increase from 1990 to 1997. But its cost ratio decline in 1998. Compared to American, Asian and European developing countries, Africa has had the highest freight cost ratio at about 11 per cent from 1990 to 1998. The plight of African land locked countries as being the most affected in this regard is shown in Table6 and Chart above.

106. Although, efforts made at all levels had borne positive results, there had been many mitigating factors, which have let down the regional and international efforts in this regard. These are inter alia: -

- Relatively low cargo availability due to lack of freight consolidation mechanisms and imbalanced traffic flows in the region,
- Low and delay prone cargo clearing procedures,
- Low level of awareness of shipper in terms of delaying containers leading to high payments of demurrage charges,
- Poor ship/port information base to shippers and lack of data interface between stake holders like port operators, customs, police, railways, roads, clearing and forwarding agents, etc,
- Lack of adequate security and of cargo leading to payments of high insurance premiums,

- The issue of corruption in processing documents and en-route,
- Use of outdated or inadequate facilities and systems,
- Long and difficult hinterland destinations, usually passing through more than one border posts,
- Inadequate network of all weather roads, applicable mainly to land locked countries,
- Reluctance to introduce reforms,
- Lack of priority given to shipping matters by governments that results in insufficient funding allocated to rehabilitate and renew shipping assets; etc.

107. The region as a whole has recognized the problem of high transport cost not only for land locked countries but also through out the entire transport chain. As a result, the matter has been tackled, relentlessly, at various forums: ECA, MCWA, COMESA, SADC, EAC, ISCOS, PMAWCA, PNUA, PMAESA, UASC, and through various transit transport corridors. The truth of the matter is that without the work of these regional and international organizations, the position of African cost of maritime transport could have been much worse than is reflected in the Tables above.

108. Co-operation in deepsea shipping. During the period of implementation of UNTACDA I, and the formative years of UNTACDA II, there was a very high feeling by the developing countries to regulate their maritime trade. Also, there was a move by countries to participate in the carriage of their respective maritime foreign commerce through the UNCTAD code of conduct for line shipping formula of 40: 40: 20. During that time, many developing countries were very eager to have national shipping lines. And indeed, some formed shipping line bases on the cargo sharing mechanisms that was anticipated through the implementation of the UNCTAD Code. It is not therefore surprising that, as at 10th July 2000, out of the total 78 countries that are signatory to the UNCTAD Code, 32 are Africans and the majority of the signatories were developing countries from other regions. The need for establishing national shipping lines best on the momentum derived from the UNCTAD Code was so great that some countries actually established their own national shipping lines. At sub-regional level, the matter was receiving active consideration by COMESA countries. At international level it would suffice to mention the Commonwealth and UNCTAD Secretariats as having given active consideration to the subject.

109. However, by the middle of UNTACDA II period, it was clear that commercial environment had changed significantly. By that time, the region was accessing the viability of the existing national shipping lines. In June 1997, a second Cotonou Round Table Conference proposed to the Conference of Ministers responsible for Merchant Shipping in West and Central Africa held in October that same year, the liberalization of market access into the maritime transport sector within that sub-region. Furthermore, it was recommended that cargo-sharing missions by shippers councils be abandoned by the year 2000. In the Second UNTACDA II Evaluation report, the matter of reforming the maritime shipping transport was highlighted.

110. One other relevant issue is the nature of the conference lines in West Africa. The conference lines have been plying that sub-region for more than 60 years. Since the UNCTAD Code came into force in the 1970s, the conferences co-opted with African

national lines, to keep third flag carriers out of the trade. The competition became so high but third flag carriers were not eliminated. What transpired is that the shippers benefited form this competition through lower freight rates. However, the situation changed when the matter was taken to the European Court. In 1992, the European Court ruled that the conference monopoly was illegal. The conference was dissolved and down went the freight rates from 10-11 percent to 7 percent of the F.O.B value of exports, in 2000. At the same time, the reserved market for West African shipping lines crumbled. As a result, most of them including Ghana's Black Star Line closed down. Many maritime decisions during the Decade period were taken with the understanding that no conference was going to exist in that part of the world. However, by the end of the Decade, the conference has re-grouped and formed another conference in 2000 called EWATA. EWATA has since then increased freight rates twice. This has put reform process back to early 1990s as policy reforms of shipping lines and shippers' councils have to be reviewed in view of this major event.

111. In view of the foregoing, the momentum aimed at promoting the development of shipping lines at national level through government initiative slowed down. By the year 2000 some countries had either earmarked their national shipping lines for privatization or had already done so. The same effect was observed in the attitude of international organizations towards any initiative aimed at creating or promoting national or multinational shipping lines. This is clearly reflected in the number of maritime shipping transport projects abandoned due to " unsuitable commercial environment" and "lack of funds". Incidentally, all projects initiated by countries, regional and international organizations in that sector were abandoned. There was therefore no successful concerted program for development of deep sea or coastal shipping lines implemented under UNTACDA II. It was one of the cases overtaken by the rapidly changing commercial environment that has hit the region in recent past. Nevertheless, individual national lines like the Sudan Shipping Line and the Ethiopia Shipping Lines Corporation engaged in their own fleet development programs.

112. It is unfortunate that major maritime nations of West African countries could not be assessed because either their reports never mentioned any thing about their maritime transport services or they simply did not send any country reports. As shown in Tables 3, a large number of African countries have tonnage in the General cargo ships and "Other types" category. Most of these ships are small. They are in the range of 500 to 750 grt. It is this group of ships, which are used for small-scale coastal shipping services. In Developing countries as a whole, this group of ships showed an increase over the 1980s, from 17.6 per cent to 26.5 per cent of the world total for general cargo ships and other types respectively. However, the African group showed a decline in both tonnage groups over the same period. What it entails is that apart from establishing new lines development of this service would involve use of the same ships but with greater efficiency and co-operation between existing shipping lines operating coastal services. By so doing, tonnage available would be increased without necessarily adding new tonnage.

113. Statistics show that 36 out of 48 African countries have ships on their registries. Majority of them did not indicate in their country reports about maritime fleets probably because they considered them insignificant. Other countries just mentioned them in passing without giving important information like the fleet performance, number and type of ships, routes they ply on, etc. Therefore, the problem of lack of proper information which existed during the UNTACDA I is still persisting under UNTACDA II in this area.

114. A close look at Table 3 shows that few countries purchased new tonnage over the period under review. Very few countries reported in some detail the activities of the

lines for a meaningful analysis of their fleet to be made. Nevertheless, an indirect assessment will have to be done.

115. During the first quarter of UNTACDA II period, the market share of Sub-Sahara Africa in shipping was between 3 to 6 per cent of the total freight lifted. It was also clear that the countries in that region could not compete against the European lines. The most important reasons were: -

- Low capacity of the fleet;
- Age of the fleet and unsuitability for the nature of the traffic;
- The decline in the volume of trade in the countries or the respective hinterland;
- Direct interference in the management process by the government, etc.

116. The most active area in shipping was West Africa. The regular liner services were divided into members of the Continental West Africa Line conference (COWAC) and non-conference lines. COWAC was comprised of 29 lines, 12 African companies and 17 European companies. This fleet profile has changed significantly due to the collapse of many African lines as already explained above. East and Southern African had little impact because of extremely low level of participation.

117. The situation has deteriorated as far as fleet capacity and age of ships is concerned. The African fleet (including North Africa but excluding open-registry countries) has fallen by more than 500 000 dwt between 1995 and 2000 representing a decline of about 9 per cent. The total fleet was 6.7 million, 6.5 million, 6.3 million and 6.03 million dwt, in 1995, 1996, 1998, and 2000 respectively. The decline could have been due to the privatization process where by some companies were dismantled and replaced by private ones. Concerning the fleet age, the situation is much worse than in 1995 because, other than those lines that collapsed or were privatized, no definite program of replacement took place. Instead, many countries are stuck with old fleets, which they cannot modernize because of the poor economic position of the countries. Despite the increase in the region's volume of seaborne trade therefore, the level of participation in liner trade remains small at less than 6 per cent. This is much lower than the intended target of 40 per cent of the region's liner trade

Development parameters in maritime shipping transport

118. It must be recognized that the commercial environment that existed during the preparation of ANTACDA II was influenced by the pressing need for equitable participation of developing countries in maritime shipping transport. The main forum of activity was UNCTAD, hence the adoption of the UNCTAD Code of Conduct for Liner Conferences. The convention entered into force on 6th October 1983. 32 African countries are party to this convention. Amongst other things, the UNCTAD Code provided an attractive formula for cargo sharing mechanisms in liner shipping. Commonly referred to as 40: 40: 20 formula. The seaborne trades of two trading partners were to be carried in those countries' shipping lines at 40: 40 ratios both ways. The remaining 20 per cent were to be shared by shipping lines in the conference flying third country flags. In short, this created impetus for developing countries to establish national shipping lines with the understanding that their national lines could be guarantied to carry 40 per cent of liner cargo on major trading routes both ways.

119. It is now common knowledge that the commercial environment had changed during the period of implememntion of UNCTACDA II. Countries have moved from

protectionism to free access to shipping transport. In fact governments have been forced to leave the transport sector to private entrepreneurs while at the same time deregulating their respective economies. As at the end of 2000, many countries in Africa had put their national shipping lines on the privatization lists. Therefore, participation in shipping was being redirected to the private sector.

120. Shippers also have had to redefine their objective functions in view of the wind of liberalization that began to blow in the past two decades. In addition, the shipping transport sector had experienced the weakening or disappearing of maritime conferences, and weakening of shipping institutions like shippers' councils, clearing and forwarding agencies, etc. In West and Central Africa, shippers were expected to stop any form of cargo sharing by the year 2000. Of course, this has to be reviewed in face of the return of conference lines to that sub-region.

121. It should be noted that the changing commercial environment had affected UNTACDA II projects, in this sub-sector. In fact, many projects in this sector failed to obtain any funding for this very reason of the on going restructuring and liberalization.

122. The development parameters of this sub-sector were to: -

- *Achieve equitable participation in sea-borne liner trade under the conditions of the UNCTAD Code of conduct for liner conferences;*
- *Increase significantly the participation of national fleets in non-liner trade under the conditions of UNCTAD resolution 120 (v);*
- *Increase the competitiveness of national fleets through modernization and adaptation of tonnage to trading requirements and through adaptation of management techniques leading to reduced unit costs of transport*
- *Increase significantly the level of ownership and control by African countries of competitive tonnage adapted to the requirements of African trade.*

Parameter 1:

To achieve equitable participation in sea-borne liner trade under the conditions of the UNCTAD code of conduct for liner conferences.

123. 36 countries had merchant ships registered in their countries. The major operators being found in Algeria, Egypt, Libya, Nigeria and Morocco with fleets of 1 110 761 dwt, 2 092 569 dwt, 667 090 dwt, 677 859 dwt and 383 786 dwt respectively. The following countries reported having purchased new ships during the period: Ethiopia; two multi purpose ships, Mauritania; one multi purpose ship, Sudan; one ship. The total African fleet as at 1st January 2000 was 6.03 million dwt lower than 1998, which recorded 6.5 million dwt. It is worth noting that the fleet level of the year 2000 was also lower than that of mid-term period level of 6.7 million dwt recorded in 1995. **The decline entails that no meaningful fleet development took place in Africa directly as a result of the said motivation derived from the Code. Table 14, shows a general decline in the region's fleet. Table 4, shows a critical aging problem. Very few African countries had second or third generation container ships signifying little fleet modernization took place during the period under review. Most vessels were general cargo ships and multi purpose ships. The average age was above 20 years, the same age group as world ships broken down.** Container vessels were first generation with a low carrying capacity of about 400/ 600 TEUs. Apart from South Africa and Egypt, the rest of Africa had relatively small ships not suitable for deep-sea liner service. However, it is worth noting here that there was some fleet development

and modernization in Mauritius, which showed a decline in general cargo and other ships while at the same time increasing its container fleet considerably in the period under review. **The overall problem is that African fleet is small and fragmented between many countries making them even more in ineffective.**

Table 14

African countries total fleet by type of ship *(in million dwt)*

Year	Total fleet	Oil tankers	Bulk carriers	General cargo	Container ships	Other types
1990	7.3	2.4	1.1	2.3	0.04	1.4
1995	6.7	2.2	1.2	1.9	0.08	1.2
1996	6.5	2.1	1.3	1.8	0.08	1.2
1998	6.3	1.8	1.4	1.6	0.2	1.2
2000	6.03	1.6	1.4	1.6	0.2	1.2

Source: Compiled from the Review of Maritime Transport, 1990-2000, UNCTAD.

124. Whereas the fleet was declining, the cargo throughput as shown in Table 7 had increased from 627.2 million tons in 1990 to 726.3 million tons in 2000. Table 15 shows that from 1990, total dry general cargo was 198.0 million tons compared to 233.0 million tons in 2000. The crude oil loaded increased steadily up to 1996. From there onwards, the crude oil loaded declined. The only exception to that trend was the oil products, which, generally, increased from 1990 to 2000.

125. The results achieved by majority of Africa fleets in 1990/91 when the fleet level was 7.3 million dwt did not match the expectations voiced at the time they were formed. The total fleet declined over the period from 7.3 million dwt to 6.03 million dwt for1990 to 2000 respectively. That represented a decline of 17.1 per cent. The combined general cargo and container ships also decreased from 2.34 million dwt to 1.8 million dwt between 1990 and 2000 respectively. That represented a decline of 23.1 per cent.

126. The important phenomena here is that whereas the combined general cargo and container ships which are used in the liner trade declined, the dry cargo increased form 198.0 million tons to 233.0 million tons between 1990 and 2000 respectively representing an increase of 18.0 per cent (see Tables 14 and 15). Applying a combined general cargo and container ships' productivity factor of 6.09 tons per dwt, their share of the total traffic attributed to them in 1990 was only 7.4 per cent. To fully comply with the UNCTAD Code formula of 40: 40: 20, in 1990/91, the region needed a combined general cargo and container fleet of at least 13.0 million dwt. In the year 2000, the productivity factor for similar category of ships was 6.42 tons per dwt. Having noted that the combined fleet of general cargo and container ships had declined by 23.1 per cent, the liner trade share of the African fleet was only 5.0 per cent of the total region's liner trade. To carry up to the maximum provided for in the Code, Africa needed a fleet of about 14.5 million dwt. The decline in the share was mainly due to heavy shading off of general cargo ships by the three Maghreb nations of Morocco, Libya and Tunisia as well as the two West African countries of Nigeria and Ghana. In North Africa, Egypt significantly reduced its general cargo fleet. Table 16 shows how the major maritime nations of Africa performed over the period. Libya, Tunisia, and Morocco reduced their general cargo fleets by 91 per cent, 50 per cent and 26 per cent respectively. Ghana and Nigeria reduced theirs by 76 per cent and 53 per cent respectively. Egypt reduced its similar fleet by 19 per cent over the period. **Therefore, no anticipated increase in equitable participation in liner shipping was achieved. On the contrary, the African share of the liner trade is lower now than it was during the last decade.**

Table 15

Total goods loaded and unloaded in Developing countries of Africa by major product group *(in million tons)*

Year	CRUDE OIL			OIL PRODUCTS			DRY CARGO		
	Loaded	Unloaded	Total	Loaded	Unloaded	Total	Loaded	Unloaded	Total
1990	309.8	73.8	383.6	35.5	10.1	45.6	96.5	101.5	198.0
1993	308.6	78.2	386.8	35.7	9.9	45.6	96.2	99.8	196.0
1994	325.1	78.4	403.5	35.6	9.8	45.4	94.2	111.4	194.6
1995	331.9	80.0	411.9	36.4	10.1	46.5	99.0	105.5	204.5
1996	379.4	78.9	458.3	31.8	10.0	41.8	100.4	106.9	207.3
1997	378.9	78.9	457.8	31.0	10.4	41.4	104.3	111.1	215.4
1998	372.8	80.5	453.3	29.0	10.7	39.7	109.3	116.2	225.5
1999	363.0	80.5	443.5	29.5	10.7	40.2	111.2	118.3	229.5
2000	370.0	81.7	451.7	30.5	11.1	41.6	114.0	119.0	233.0

Source: Derived from the Review of maritime Transport, 1990-2000, UNCTAD.

Table 16

Behavior of fleets by ship type of major African maritime shipping transport nations (*in, 000 dwt*)

Country	Year	Total fleet	Oil Tankers	Bulk Carriers	General cargo ships	Container ships	Other types
Egypt	1990 2000	1925 2093	496 365	565 1035	668 544	18 ..	26 131
Algeria	1990 2000	1062 1110	46 52	254 288	296 295	.. ..	466 475
Libya	1990 2000	1448 667	344 53	.. ..	100 9	.. ..	24 39
Nigeria	1990 2000	727 677	436 519	.. ..	246 115	.. ..	95 43
Morocco	1990 2000	618 394	19 20	163 ..	151 112	10 25	275 226
Mauritius	1990 2000	141 190	.. ..	79 5	28 41	20 131	275 13
Tunisia	1990 2000	442 170	47 32	58 26	61 30	.. ..	276 81
Ethiopia	1990 2000	91 120	6 4	.. ..	84 116	.. ..	1 ..
Ghana	1990 2000	110 92	1 9	.. 0.3	73 18	.. ..	36 66

Source: Review of Maritime Transport, 1990-2000, UNCTAD.

Parameter 2:

To increase significantly the participation of national fleets in non-liner trade under the conditions of UNCTAD Resolution no.120 (v).

127. The relevant paragraphs of the above-mentioned UNCTAD Resolution no. 120 (v) state that: -

1. Calls upon Governments to take steps to ensure for developing countries equitable participation in the transport of all cargoes, and more specially bulk cargoes, generated by their own foreign trade by national vessels of the respective trading countries or by vessels otherwise operated by them;

2. Recommends the application of the following principles, taking into account pragmatic considerations that: -

(a) The transport of regular bulk and refrigerated cargo between a pair of exporting and importing countries should have equitable participation by the national lines of the respective trading countries, or by vessels otherwise operated by them;

(b) Other bulk and refrigerated cargoes should be subject of bilateral agreements between the trading partner countries providing for the equitable participation in the trades by the national lines of the these trading partner countries;

(c) Until developing countries achieve an equitable share of world tonnage, contracts between developing and developed countries for the sale or purchase of bulk cargoes, or the exploitation of natural resources which give rise to bulk cargoes, should stipulate that a substantial and increasing portion of cargoes shall be carried by the vessels of developing countries or by vessels operated by them;

(d) Urges developing countries which import bulk cargoes especially in less-than-ship-load quantities to take measures among themselves for joint bulk shipping operations in co-operation with the exporting developing countries; etc

128. The above quoted UNCTAD Resolution 120 (v) is clear as to its objective. Table 15 shows the evolution of the Crude oil and oil products cargo as well as tanker and bulk carriers over the period under review. As already said in the foregoing paragraphs, total liquid and dry bulk cargo increased while the tanker and bulk carriers fleet decreased in the region. In 1990, the productivity figures for Oil tankers and Bulk carriers were 5. 96 tons and 3.29 tons per dwt respectively. Those of end of 1999 were 6.65 tons and 3.03 tons per dwt for Oil tankers and Bulk carriers respectively. By direct interpolation, the share of the regions' Oil tankers in the total African Crude oil carried in 1990 was only 4.0 per cent. Similarly, the share of Oil products was only 0.8 per cent. The region needed 32.2 million dwt and 7.0 million dwt of Oil tankers and Bulk carriers respectively to carry about 50 per cent of the total trade. Crude oil fluctuated from 1990 to 2000. Whereas total Oil products decreased due to the fall in the products loaded over the same period. Meanwhile, Oil tanker fleet declined significantly whereas the Bulk carrier fleet increased steadily over the same period. The result was that the share of Crude oil carried in African bottoms declined form 4 per cent in 1990 to 2.4 percent in 2000. However there was a remarkable increase in the Oil products carried in African bottoms form 0.8 in 1990 to 10.2 percent in 2000. To carry about 50 per cent of the cargo, the region needed at least 34.0 million dwt and 7.0 million dwt of Oil tanker and Bulk carrier fleet respectively.

129. The complexity of the matter is that chartering could increase this tonnage. Algeria had reported that her carrying capacity had nevertheless increased to 20 per

cent of the trade through chartering. This could be true for other countries but there is no information to confirm it.

130. Therefore, there was no improvement in the carriage of bulk cargoes from the region as intended by the provision of UNCTAD Resolution no. 120 (v).

Table 17

Evolution of bulk cargo and types of ships in Africa, 1990, 1995-2000

Year	Bulk cargoes *(in million tons)*			Type of ships *(in million dwt)*		
	Crude oil	Oil products	Total	Oil tankers	Bulk carriers	Total
1990	383.6	45.6	429.2	2.4	1.1	3.5
1995	411.9	46.5	458.4	2.2	1.2	3.4
1996	458.3	41.8	500.1	2.1	1.3	3.4
1998	453.3	39.7	493.3	1.8	1.4	3.2
2000	451.7	41.6	493.3	1.6	1.4	3.0

Source: Derived from the Review of Maritime Transport, 1990-2000, UNCTAD.

Parameter 3:

To increase the competitiveness of national fleets through modernization and adaptation of tonnage to trading requirements and through adaptation of management techniques leading to reduced unit costs of transport.

131. There is no statistical evidence indicating that a major modernization or adaptation process took place in the region as whole during the period under review. The following countries had added tonnage to their respective fleets: Ethiopia; two multi-purpose ships, Mauritania; one multi-purpose ship and Sudan; one ship (the assumption is that it was multi-purpose ship because no container ship was recorded on its registry on the period.). It can also be deduced that Mauritius under took a major fleet development and possibly modernization as well. Her general cargo and rest of the fleet declined whereas container ships increased by more than fivefold. The problem is that most countries did not give any details of their fleet.

132. The common feature in the country reports of the few, who responded to ECA's request for evaluation data, is that they were at an advanced stage of privatization. It appears therefore that instead of modernization and adaptation, most of the countries were in the process of privatization. Some of them, probably those countries that said nothing about their fleets, could have already privatized or their lines had been dissolved.

133. Algeria had reported that its maritime shipping transport sub-sector, like all other sub-sectors, suffered from shrinking funding for the renewal and growth of its fleet. It was also reported that because of the problem of funding, the fleet could not conform to international safety and security norms. There were delays in conforming to the International Safety Management Code (ISM), Standard of Training and Watch-keeping for seafarers (STCW) and World Distress and Maritime Safety System (SMDSM). Furthermore, Algeria reported that part of its fleet was old resulting in considerable increase in operational loss and poor performance. Not withstanding the fore mentioned problem, Algeria's strategy is to increase its fleet. A recovery and restructuring program has already been put in place.

134. Ethiopia and Sudan indicated that they had carried out training and rationalization of staff deployment with the view to improving the performance of their fleets. However, no fleet performance indicators were provided.

135. **Using general data, it can be concluded that no modernization program or adaptation took place. Consequently, reduced unit cost was not realized.**

Parameter 4:

To increase significantly the level of ownership and control by African countries of competitive tonnage adapted to the requirement of African trade.

136. Table 2 shows a decline in the competitive fleet of African countries. It would however be naïve to leave the matter there. The facts shown by statistics in Table 12 and 13 reflect that some countries such as Egypt, Algeria, Mauritius and Ethiopia had significantly increased the level of ownership of the competitive fleets. Bulk carriers for Egypt, Oil tankers and Bulk carriers for Algeria, General cargo and container ships for Mauritius and General cargo ships for Ethiopia. However, the huge reductions of general cargo ships by a few countries such as Libya, Ghana, Nigeria and Tunisia have adversely affected the region's average performance. The reasons for such a reduction could be due to the recent history of West Africa shipping lines. Following the demise of Liner Conferences serving the Europe-West and Central African shipping range, through European Commission action, in the early 1990s, the region saw the collapse of many National Shipping Lines of MOWCA member states which depended on the organizational convenience of Liner Conferences. It showed that state lines unable to compete in a largely deregulated market, fell into decline and have now been, or are about to be liquidated.

137. Those who thought that they had seen the last of the conference in west Africa were wrong because after the National Lines were technically eliminated, the large European shipping lines regrouped and formed a Liner Conference called the Europe/West African Trade Agreement (EWATA) with the following lines as members: -

- A.P. Moller-MaerskSealand
- H. Stinnes Linien
- Nile Dutch African Line
- P.O. Nedlloyd
- Safmarine Container Lines and
- West Africa Linien-Dienste

138. Generally, MOWCA has realized that the sub-region was lagging behind in development of the shipping sector due to "low level of participation of the sub-region in the supply of shipping services". And indeed, deep-sea shipping is left to foreign shipping lines that now carry virtually all the foreign trade.

139. The picture certainly looks gloomy. Many countries with fleet registered on their national registry, particularly on the general cargo and other types have on the contrary indicated not having any deep-sea fleet. **This implies that the ships on their registry are small and not suitable for deep-sea trade. Table 3 shows that such fleets constitute quite a substantial number of ships on the registry of many countries.**

The statistical data available shows that even those small vessels are very few indeed. Therefore, there was neither significant increase in the level of ownership and control by African countries of competitive tonnage nor adaptation to the requirement of African trade.

Maritime Ports:

140. The **sub-sector's** long-term objective was *to increase trade by improving the performance of African ports*. The main areas of immediate concentration and the activities under them are discussed below.

a) Human resources development

141. The assessment of this strategy should be understood taking into account the perceived problem and expected solution at the inception of UNTACDA II. A significant initiative in early 1990s was the undertaking of a study by UNCTAD on Strategies for Human Resource and Institutional Development. The Study was carried out for the Transport and Telecommunication sector in Sub- Saharan Africa. The relevance of that study whose report was published in 1991, is that it kind of set a stage for action in the development of human resources in the region by articulating the problems and suggesting solutions which inspired actions in HRID in ports/harbors.

142. The main weaknesses of ports in the region as assessed in the aforementioned study were:

"Equipment is up to date; management and performance was not."

" ...The designing of the organization of the ports appears to be a major bottleneck in operations. The studies showed that organizational structures are faulty, to varying extents. There are minor weaknesses in the allocation of responsibilities to departments, with overlapping or duplicated functions, or with functions not clearly defined... overstaffing and imprecision over who should do what reduced efficiency and staff morale."

"In the port sector, the need for application of management information technology was felt acutely...a radical change of work ethic was considered necessary in the case study of ports."

143. These weaknesses, though affecting ports differently, had direct or indirect effects on port personnel. Staff welfare and social benefit were considered to be very good. Reasonable steps had been taken in manpower planing, training and salary structuring. Top management was found to be excellent but faulty organization structures and poor management styles at middle and lower levels.

144. Solutions suggested in the study were primarily aimed at eliminating or reducing problems highlighted. The main approach was to sensitize senior policy makers to sighted problems and priorities. In this connection join seminars were proposed between policy makers in relevant ministries and decision-makers in ports with a view to changing attitudes on importance of ports to the national economy as well as their need for freedom to operate, and need to avoid excessive union power. Seminars were also proposed in order to develop improved policies on government-port relationships, co-ordinated procedure for handling urgent port problems, and a system of financial control.

145. Short courses were also suggested for port managers aimed at, amongst other things, helping them to appreciate modern management approaches, accept radical

change, and need for imparting the modern work ethics and the impact of modern information technology on human resources development.

146. In line with these recommendations, which were also among the strategies of UNTACDA II, and directives of Ministers of Transport and Communication at their 11th conference held in Cairo, Egypt in 1997, many seminars and workshops were held for port executives at all levels in the region. Regional ports associations, sub-regional organizations, IAPH, ECA, ECLAC, ILO, and UNCTAD organized and delivered seminars, workshops and training in the region. Some of the functions were held abroad. The functions were successful and achieved many changes in the ports of the region generally some of them being very radical. The sessions helped, significantly, the process of restructuring and reforms in ports, port commercialization or privatization in the region.

147. It is necessary to highlight here the activities undertaken by UNCTAD. The UNCTAD Port Management Certificate Program was successfully initiated and implemented starting from December 1996 in ports of Cotonou, Benin; Dakar, Senegal; Libreville, Gabon; Port de Grand, Belgium. A first training-of-trainers seminar was held in Gent, Belgium, in1996 and a second one took place in Las Palmas, Spain, in 1997for representatives of these ports. In 1998, UNCTAD was extending the training extended to other port communities. Also, the success of the program led to considering the possibility of delivery of the program by national educational establishments using the new pedagogic material developed at earlier deliveries. Through this and other UNCTAD training programs, many African nationals were trained thereby contributing to human resources development in the region. Regarding the TRAINMAR program in Africa, co-operation between centers was being activated after a period without structured co-operation among the various qualified centers still active individually. In March 2000, trainers or managers from Angola, Benin, Cameroon, Cape Verde, Gabon, Gambia, Guinea, Senegal, Togo and Tanzania met in Las Palmas, Canary Islands where UNCTAD was requested to support renewed co-operation among the interested countries.

148. ILO was also supportive to the training initiatives of port associations through the Portworker Development Program (PDP), which was the basis for the global port training strategy. The importance of PDP is that there was a centrally prepared material, properly tested and validated. The development objective of PDP is to enable governments and port authorities in developing countries to establish effective and systematic portworker training schemes, designed to improve cargo-handling performance, working conditions and practices, safety and the status and welfare of portwoker.

b) Improvement of port productivity

149. Port performance. The region has been going through operational changes of great magnitude over the period of the ANTACDA II. Using the restructuring and reforms that had been and are still going on in the region can best explain the manner of change in operational procedure. Many ports were and are going through radical changes in administration and procedures of doing things. Modern management systems have been accepted and implemented within the liberalization environment. Many seminars and workshops were held in this regard with tremendous success.

150. The aim of the radical changes certainly was targeted at the quest for improved efficiency, overall and higher productivity at terminal. Both these have the tendency of increasing the rate and volumes of cargo through the port and the ability of the ports to

adequately respond to the needs of its clients and satisfy them. The ports in the region were, and are still, proceeding with commercialization or privatization aimed at meeting this target.

151. Ports all over the region are at one stage of structural reforms and commercialization or another. Recent examples are ports in Kenya, Tanzania, Mauritius, Mozambique, Sudan, South Africa, Djibouti, Cameroon, etc. The result of these reforms has been, amongst other things, significant increases in port productivity as indicated by growth in the average crane moves per 24 hrs and decline in ship turn round time.

152. Mauritius Port Authority (MPA) as an example:

153. MPA was established as landlord port as from 1st August 1998 following the proclamation of a new Ports Act 1998. MPA undertook major structuring and reorganization exercises. One of the new roles of MPA as a landlord, is the "entering into concession contracts for the provision of port and cargo handling services by qualified and licensed operators under such general terms and conditions as the Authority may determine." A concession contract was signed in January 1999 with Cargo Handling Corporation for the operation of the container terminal.

154. The performance at the terminal increased significantly from an average of 8 TEUs per gross gang hour for the year 1998 to between 10.4 to 14.6 TEUs per gross gang hour for the first half of 1999 as shown in Table 14. More important still was the fact that performance continued to increase. Also note worthy was the high performance peaks realized of 24.8 TEUs, 26 TEUs and 28.4 TEUs per gross crane moves over the period. Furthermore, ships benefited from this rise in performance by meeting their productivity targets at the terminal.

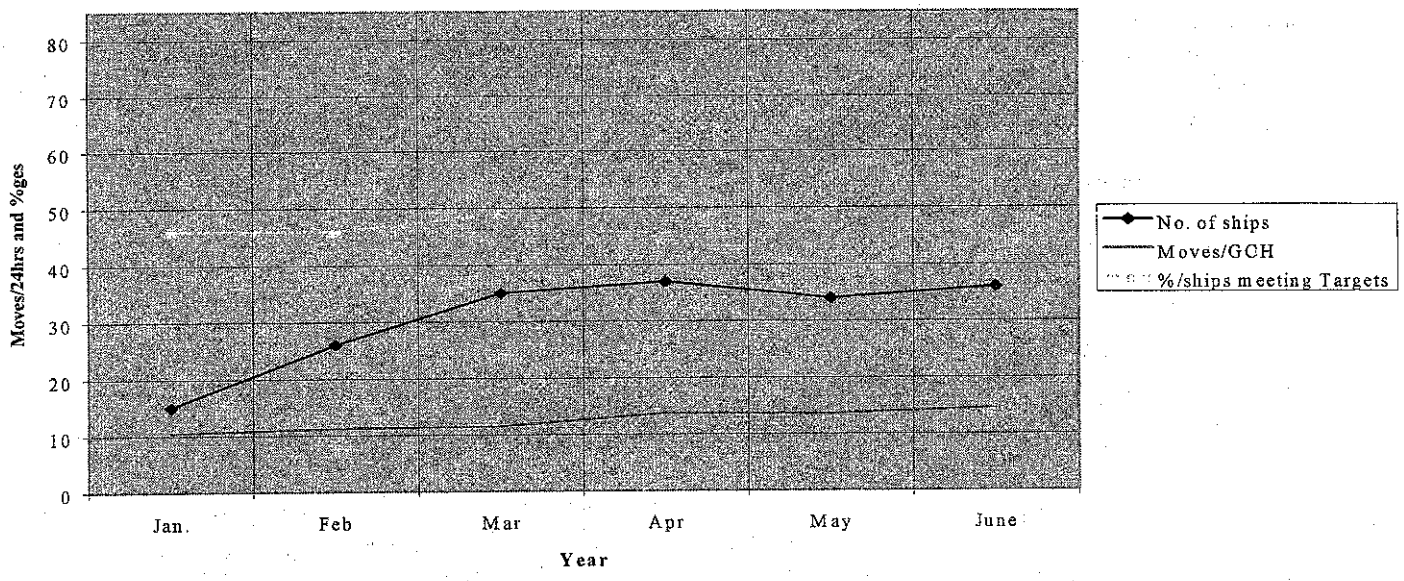
Table 18

Mauritius Container Terminal Performance Indicators, *part of* 1999.

1999	Number of ships	Number of moves	Moves per gross crane hour	% of ships meeting their productivity targets
January	15	3 089	*10.4*	*46*
February	26	6 543	*11.2*	*49*
March	35	7 720	*11.5*	*46*
April	37	9 012	*13.7*	*73*
May	34	8 740	*13.6*	*71*
June	36	8 899	*14.6*	*83*

Source: ECA seminar reports on commercialization, 1999.

Chart 5: Mauritius Port Productivity Indicators 1999



155. Productivity indicators showed better performance bulk cargo than break bulk cargoes. The country data showed that the productivity in handling containers increased after the purchase of mobile container handling equipment in 1998. The performance of Massawa port increased from 4 moves per gang/hour in 1997 to 7moves per gang/hour in 1998. The average performance further increased from 7 moves per gang/hour to 15 moves per gang/hour in1998 and 1999 respectively. However, these apparent improvements pertain to major ports that have embrace restructuring and liberalization principals as well as those, which have taken action towards modernization of port equipment. Most of the other ports performances are still in the state of low out put, high operating and maintenance costs and generally poor quality of services to customers, both ship and cargo interests.

Table 19

Average productivity per gang/hour at Massawa port

Type of cargo	1997	1998	1999
Bulk **Bagged** **break bulk** **Containerized**	29 18 11 4 moves	24 18 13 7 moves	22 18 16 15 moves

Source: Derive from country report.

Most of the other ports performances are still in the state of low out put, high operating and maintenance costs and generally poor quality of services to customers, both ship and cargo interests.

156. Simplification of customs procedures. In any port, there are various ways of doing things devised by port operators. These are constituted into procedures, arrangements and issues for cargo movements from the time it is landed at the port as import or export cargo to the time it reaches the consignee. It is well understood that the more complicated those procedures, clearance arrangements and issues are, the more costly a port would turn out to be. There are many players involved in port procedures. The major players, excluding the port authorities, are the Clearing and Forwarding Agents (mostly representing the cargo interests), Customs Authorities, Police Authorities, Transporters, Port Heath Authorities, etc.

157. In many African ports the Customs procedures constitute one of the major problems in the whole process of clearing goods form the port. Any port related delays have almost invariably included the problem of long and often exasperating customs procedures. The major problems in this connection are many, one is that the customs authorities often work under rigid government rule and regulations. These rules and regulations are implemented by putting in place specific sequence of actions to be taken or followed when clearing goods for customs purposes generally called customs procedures. Hence the presence of the customs authorities in ports are mainly to protect the fiscal revenues through the collection of duties on cargoes and establishment of procedures and practices which ensure that goods in transit and contraband do not enter the national economy.

158. It is well understood that compliance with customs procedures by both the customs authorities and the shipper concerned was easy in the centuries gone by because of low volumes and slow transport systems. The customs officers had all the time to thoroughly scrutinize documents, carry out procedural checks and inspections on all goods. Since that time, however, there has been an enormous increase in the volume of trade and in the speed of transport systems. Many customs authorities have been very slow to adjust to the changes and instead, they continued using old documents, procedures, and inspection techniques. Also, while international commerce is moving towards the removal of restrictions, in some cases, customs could be seen creating more restrictions and increasing formalities. This creates bottlenecks to the quick flow of goods in ports.

159. Given the fact that customs have enormous legal powers, the ideal situation could be for customs authorities seek to ensure not only total compliance to fiscal requirements but also internationally accepted standards for facilitation of trade flows. They should be seen to be simplifying, harmonizing and reducing their documentation, procedures and requirements so as to facilitate trade flows. Since both compliance and facilitation are important, the customs authorities should balance them so that a more commercial approach might be attained.

160. In the region, there has been many meetings, seminars, workshops, symposiums, etc held at national, sub-regional, regional and international level where matters of customs procedures were discussed. Ports associations, sub-regional organizations have impressed upon governments to change customs procedures to meet the present needs of trade flows. Facilitation conventions have been drawn and signed. The matter is also tackled through the many regions' transit transport corridors. Therefore, streamlining and harmonization of customs procedures is an-on-going process in the region. In this regard, UNCTAD had co-operated with regional and the various sub-regional bodies in the transit sector in the development and implementation of customs and transport information systems. The most outstanding activity was the work towards the strengthening of customs transit control and simplifying customs procedures through customs reform modernization program (ASYCUDA) and Advance Cargo Information System (ACIS). The transit module covers all functions of customs control and transit monitoring of transit cargo. It should be noted that this UNCTAD

information technology system has been very useful and countries from East and West Africa have benefited from it. As a result of the successful of ASYCUDA, a new module known as ASYCUDA++ software was developed in 1999, to manage customs transit procedures. This module will assist to further streamline for, customs purposes, three transit documents, namely, the Transit Form (T1), the TIR carnet and the First Identification Procedure (FIP). This module is usable for all the types of transit as defined in the Kyoto Convention covering all the cargo movements. ACIS gives logistical information by tracking equipment and cargo on all modes, i.e., rail, roads, and lakes/rivers and at the interfaces such as ports and inland clearance depots, as well as providing information a head in advance of cargo arrival.

161. In West Africa, customs procedures and practices have give rise to alarm over many years. Procedures still appears to be complicated and bureaucratic, and often not fully under stood by customs officers. The customs officers often, also, have little understanding of relevant international agreements. There has been, in spite of attempts by ECOWAS and UEMOA, a lack of co-operation between national customs authorities. Formal procedures may be onerous, but worse are the widespread use of informal practices by customs authorities. These reduce the efficiency of international transport and have a marked effect on transport cost, although this is quantifiable only with difficulty. MOWCA, with the support of the European Commission, commissioned a study of these problems, at the beginning of 2000. Recommendations were made to clear up the informal practices, improve the quality of customs officers by training, simplify procedures, promote a greater awareness of international agreements and encourage wider co-operation of customs authorities. It is not clear, however, that this initiative has yet made any noticeable improvement in the situation. However, it looks the sub-region is striving to establish a customs union and a lot of work has been put into trade liberalization treaties and activities. One major activity in this regard is the drafting of a single customs document by ECOWAS in collaboration with UEMOA. Once this is fully implemented, no doubt, trade will be facilitated and consequential costs would be reduced. The main difficulties being faced in West Africa in this area are: -

- Some member countries of ECOWAS have not ratified this protocol and have not yet taken action to remove tariff barriers;

- Those who had long ratified the protocol have failed to print the harmonized documents;

- Problems of harmonizing activities of ECOWAS and UEMOA in this area;

- The absence of measures to enlighten economic operators about the ECOWAS Trade Liberalization Scheme.

162. In southern Africa, SATCC and COMESA are co-operating in streamlining customs procedures. For instance, SATCC is working on a one-stop-border clearance procedure in order to reduce delays at border posts. COMESA has developed a few instruments such as the Regional Customs Bond Guarantee (RCBG) and the COMESA Customs Document (COMESA-CD). RCBG is an instrument designed to:

- Eliminate the opening and cancellation on the basis of general guarantee and cash depots of customs bond guarantee for each country transited;

- Reduce transport costs by simplifying transit procedures;

- Quicken clearance of cargo by cutting delays at border crossing when freight forwarders have no sufficient customs bonds or guarantees.

- The COMESA-CD seeks to have a harmonized customs document to replace the many different documents used in various member states. Its benefits include: -
- Reduction of documentation by 25 per cent;
- Reduction of delays at borders;
- Wide and deeper co-operation between national customs authorities from the use of one clearance document, etc.

163. These developments, which have taken place with the blessing of the governments and their respective Customs Authorities, have only recently started bearing results in many countries. For instance, Kenya had reported the reduction in customs documentation procedures. Kenya has simplified documentation and reduced the number of stamps from 13 to 4.

164. However, a lot of work still remains to be done the region, to change customs authorities from the role they have since played of impeding the smooth flow of cargo in ports. They should also be seen to be departing from being the breeding ground of informal procedures.

c) Improvement of port maintenance

165. The most important port equipment affecting productivity at berth is the quay crane. Failure of the quay crane invariably means poor performance. In their 1995 report of Review of Maritime Transport, UNCTAD reported that a round one fifth of all in-service container cranes were above 20 years of age. At that time, the cheapest new Ship-to-Show Gantry (SSGs) crane to service a Panamax size container ship was selling at an average price of US $ 5 million. Ports in developed market-economies were at time preferring refurbishment, which was cheaper than procuring new ones. UNCTAD also noted in that same publication that the delivery of new container SSGs did not reduce significantly the proportion of SSGs over 20 years. It is obvious that the older the equipment the more costly it is to maintain and the more dangerous it is to operate.

166. 1n 1995, Middle East and Africa had a total of 149 container SSGs. 102 of them were pre-1985 deliveries representing about 85 per cent. SSGs delivered from 1985 to 1994 were 47 representing 32 per cent. This means by now most SSGs in the region may have become over aged. It was therefore not surprising that most port training colleges established initially majored on maintenance of port equipment. Therefore the main problem in this connection has not been lack of personnel to do a good job. In the early 1990s, the problems were shortage of foreign exchange, lack of foreign exchange budget for ports and unsympathetic bureaucratic procedures in financial departments of governments. Meetings of ports associations during that period lamented about the problem of equipment maintenance and the need for sharing ideas on strategies of repair and maintenance. Also majority of projects were on rehabilitation of port equipment.

167. The subject should be considered together with the adaptation of equipment mentioned in the above paragraphs. Rehabilitation, repair and maintenance have been one of the biggest problems of port authorities in Africa. A few countries have admitted that their port authorities have reached the very limit of their financial capabilities. Their respective countries have also been going through financial difficulties. Cannibalization

of equipment like SSGs has taken place to provide spares for others indicating not only obsolescence and age problems but also lack of funds.

168. However, since liberalization, the problem of foreign exchange is expected to end and ports have been devising new maintenance schemes including those on expeditious procurement of spares and maintenance have been made to meet their customers' expectations in the era of commercialization. Sooner or latter, the aged equipment must be replaced under liberalized management.

d) Improve port administration and institutional aspects

169. As explained in the foregoing paragraphs have been going through radical changes and great challenges during the Decade period. Institutional and administrative reforms took place or are taking place in many ports of the region.

170. Reforms of existing port institutions to reduce or remove altogether the institutional inadequacies are fundamental in order to improve port performance. In this connection, the relationship between ports and governments is being reformed. Reforms in provision of suitable policy guideline, preparation of comprehensive performance indicators, participation of private sector, etc, are going on.

171. Institutional reforms and co-operation in port cannot be effective unless they are support by organizational charges and improvement in management or administration. To this end, may seminars and workshops were held in the region with a view to introducing appropriate institutional and managerial reforms. The improvement in port performance reported by some countries was a direct result of the reform activities in this aspect as well as commercialization processes.

e) Greater co-operation among African countries

172. Generally, Africa as region has experienced a great zeal for regional co-operation during the period under review. Many countries and organizations had created sections or divisions in their respective organizations to deal with it. Many sub-regional organizations had entered into some sort of co-operation arrangements with one another. Also, it is worth noting that many regional organizations have observer status with International organizations like IMO, UNCTAD, etc and through them, African countries co-operate on various issues including those relating to maritime matters.

173. The North African countries had intensified their co-operation in maritime matters through the Mediterranean Memorandum of Understanding (MOU). The Mediterranean MOU was signed in July 1997. The MOU covered co-operation in implementation of relevant IMO conventions. African countries involved included Algeria, Egypt, Morocco and Tunisia. Similarly, Eastern and Southern African countries had co-operated in maritime matters through various sub-regional organizations. These were COMESA, SADC, EAC, ISCOS and most recently the Cruise Indian Ocean. Also, several countries in the sub-region attended a meeting in Mumbai, India on port state control. These were Djibouti, Eritrea, Ethiopia, Kenya, Tanzania, Mauritius, Mozambique, Seychelles and South Africa. The meeting culminated into an Indian Ocean MOU on port state control.

174. The West and Central countries had also intensified co-operation in maritime transport through various forums like MOWCA, ECOWAS, etc. Regarding port state control, they took a similar initiative in October 1999 when 19 countries attended the Third preparatory and signatory meeting in Abuja, Nigeria. 16 countries signed the

MOU on port state control. These were: Benin, Cape Verde, Congo, Cote D'Ivoire, Gabon, Gambia, Ghana, Guinea, Liberia, Mauritania, Namibia, Nigeria, Senegal, Sierra Leone, South Africa and Togo. The remaining countries have since signed

175. Further more, the region had forged ahead in region co-operation through port associations.. Regional co-operation between ports during the period under review pointed towards the creation of a Pan-African Association for Port Co-operation (PAPC).

176. Co-operation in marine pollution and pollution control. All port associations in the region have taken a leading role in marine pollution and control matters. This is, understandably, due to the fact that most of the expertise to handle marine pollution problems is concentrated in port labor and management. Most ports have small sections within the ports to handle pollution, which could be used as nucleus for the development of national pollution prevention or monitoring units. Almost all port association meetings had included a resolution to governments to ratify and implement marine pollution conventions.

177. In addition, bodies like MOWCA, SATCC, COMESA, EAC, etc have added a strong voice to their respective members to ratify and implement oil pollution and pollution control conventions. The African countries have real ecological and financial interests in matters of pollution control in the sense that coastal countries also happened to be important fishing and tourist destinations. Tourism in many of these countries highly depends on clean beaches. Moreover, these countries have invested heavily in tourist infrastructure and are keen to ensure that such investment was not made unsuccessful by pollution of their coastline. Pollution of the seawater would also destroy the ecological system of the region. This in turn would affect the production of fish in the regional waters, in the long run. Some countries in the region have invested heavily in fishing infrastructure and equipment. At the same time, the regions coastal waters provide some of the busiest shipping routes for large volumes of oil tanker traffic. The region also harbors its own oil producing countries, with a network of oil tanker movements in its coastal waters. Therefore, they are keen to see that their investment in tourism and fishing was not made ineffective by pollution of the coastal waters.

178. The commitment of IMO to safer shipping and cleaner seas on a global basis is well known. During the period under review, IMO had taken a very important step towards assisting the region to ratify and implement IMO conventions. In 1999, the organization opened regional offices in Africa to assist the countries to ratify and implement the marine pollution conventions. The IMO regional co-ordinators had carried out needs assessment missions in 28 African nations. Those missions had enabled the IMO Secretariat to identify and establish appropriate priorities for African region. Additionally, IMO had co-operated with regional organizations such as PMAESA, MOWCA, and SADC, in identifying priority needs for compliance with and enforcement of global standards. Consequently, IMO launched regional ITCPs for the periods 2000 to 2001 and 2002 to 2003. The activities of IMO in the region would therefore concentrate on strengthening/upgrading maritime Administrations, reviewing/upgrading maritime legislation, and preventing and control of marine pollution through the provision of assistance in the ratification and implementation of MARPOL 73/78 and the OPRC convention.

179. The best individual country report on this matter came from Algeria. Algeria, in conjunction with other two Maghreb nations Morocco and Tunisia, had put in place an elaborate program of marine pollution management. They undertook a huge project on the Establishment of a Hydrocarbon Anti-pollution System. World Bank funded the project from a grant by the World Environment Fund (WEF) for a total of US $ 20

million. The amount was broken down as follows; Algeria US $ 7.4 million, Morocco US$ 6.3 million, and Tunisia US$6.3 million. The objectives of the project were to reduce the spread of oil pollution in the international waters of the Mediterranean through the establishment of structures and installations to handle waste in the ports in Algeria, Morocco and Tunisia. Also, it was meant to strengthen the capabilities of the three countries to limit dumping at sea. Three maritime traffic systems regulation stations (VTS) were installed in the ports of Algiers, Skikda and Arzew. The systems components included radar and radio-goniometry equipment VHF 2 ways, radio communication equipment as well as safety and security equipment. The trial runs and delivery of the equipment in the three ports were done in 1998.

180. The reason for quoting the example of North Africa is to show the kind of cost involved in implementation of conventions and the need for concerted action in mobilization of funds to meet the cost of implementation.

181. Most IMO conventions can be implemented more effectively on regional and sub-regional basis. For Example, the SAR Convention, adopted in Hamburg in 1979 and which entered into force in 1985, aims at developing an international SAR plan so that no matter where an accident happens, the rescue of persons in distress at sea would be co-coordinated by SAR organization and, when necessary, by co-operation between neighboring SAR organizations. The consequences of being party to SAR are that each country is expected to: -

- Develop own regulatory framework;
- Setup own share installations and,
- Run an own coast guard.

182. In view of the considerable obligations posed by the 1979 SAR Convention, it had not been accepted or ratified by many of the world's coastal states including those from the region. A revised SAR Convention entered into force on 1st January 2000. The revised SAR Convention, which to date has been ratified by 64 countries representing 47.05 percent of the world shipping tonnage, clarifies the responsibility of Governments and puts greater emphasis on the regional approach and co-ordination between maritime and aeronautical SAR operators. It is, therefore, suggested that to avoid setting up a multiplicity of SAR institutions and installations, sub-regional coast guards should be established. From this stand point lessons should be learnt from the experience of the United States Coast Guard, which is a unified coast guard for the vast American coastline. Once set up, the proposed coast guards could, amongst other things, deal with: -

- Problems related to exploitation of marine resources, security and safety; and
- Implementation of maritime related conventions and harmonization thereof. The issues involved here would be those found in SOLAS, MARPOL, ISMcode, and STCW and SAR conventions.

f) Special arrangements for landlocked countries

183. The problems of landlocked countries and especially the high cost of transport experienced by these countries have always received sympathy from the literal countries as well as international and regional organizations. The importance of efficient transit systems for land locked countries has been emphasized in numerous

studies, reports, meetings, seminars, workshops, and symposiums over the last 30 years. There is a general understanding that despite all what has been done, more is still to be done to eliminate remaining bottlenecks. These are inadequate port, rail and road facilities, communication barriers and many other non-physical barriers.

184. The whole region is co-operating in one way or another in this aspect. Apart from international law conventions' requirements, it should be noted that facilities offered to landlocked countries by coastal countries have financial returns. Transit cargo is an important source of revenue to the transited country. Under normal circumstances, the coastal countries are very keen to provide any service including transit shades, ICDs in close proximity to the border points and free zone facilities within the port areas. In this regard, the region has been fully co-operating mainly through port associations, transit corridors and through bi-lateral arrangements to provide infrastructure for transport, warehousing and cargo handling. In some cases, dry ports, depots, bonded warehouses and special transit facilities at ports. Many countries in West and Eastern Africa have provided reasonable facilities for their landlocked neighbors. For instance, Kenya has done a lot for the hinterland countries of Uganda, Burundi, Rwanda and D.R.Congo. Tanzania has provided facilities for Burundi, D.R.Congo, Malawi and Uganda. In Togo, the port of Lome has given transit depots to Burkina Faso managed by the Burkina Faso Chamber of Commerce. Also, the port of Lome has given away large parcels of land, within the port, on which, Burkina Faso, Niger, and Mali have erected warehouses and manage them autonomously. Nigeria, Gambia and Guinea, just to name a few, have also provided similar facilities to their respective landlocked neighbors.

185. The matter is being considered at ECOWAS. The ECOWAS Heads of State adopted a fast track approach at their summit meeting held in Lome on 9th and 10th December 1999. Following that meeting several meetings were held aimed implementing the decision of the Heads of States. Seven Member states: - Benin, Burkina Faso, Ghana, Mali, Niger, Nigeria and Togo held a mini-summit, to discuss the creation of a Borderless Zone between their countries. An ECOWAS Ministerial Meeting on Fast-Track Approach to Integration was held in Abuja on 26th March 2000. Many meetings followed on the subject of free trade area by April 2000. The Executive secretary of ECOWAS has been working out modalities of the countries having a common external tariff and sorting out special problems of landlocked countries such as provision of EPZ facilities and Free Zones.

186. Free zones are essentially duty free areas for all goods destined for re-export after reprocessing or breaking bulk, sorting, grading, cleaning, packing, repackaging, etc. Facilities such as land areas, spaces, warehousing and storage, etc., are offered to operators on special agreement with the free zones authorities. Therefore, based on the foregoing paragraphs, facilities are already being offered to landlocked countries but not always on duty free basis. Transit rates are paid. In some cases transit bonds and escorts are put in place to avoid diversion of transit cargo into the transited countries.

187. Export Processing Zones (EPZ) and Free Zones are concepts that have been understudy and consideration during the UNTACDA II period in the region. EPZ facilities were established in early 1990s in countries such as Nigeria, Kenya and Mauritius. In 1997, Ghana declared Tema and Takoradi as free ports. Free Zones were being established in Cotonou, Benin from 1997. This concept is still being considered in many African countries. With the spreading of the liberalization environment, the proliferation of free zones will naturally fall in place, sooner or later.

g) Improvement of marine facilities

188. Ports in the region have been very active in improving port navigation and ship-to-show communication facilities over the period under review. Generally the ports are increasingly becoming sophisticated in this area. Most of them have been in the process of modernizing their respective ports navigational aids. These include Algeria, Angola, Eritrea, Gabon, Gambia, Guinea Bissau, Guinea, Kenya, Morocco, Mauritania, Tanzania, Tunisia, etc.

189. Improvement of communication between ports and ship to show has also been tackled through the ports management associations. The development of port communities in West and Central Africa has greatly assisted in the improvement of navigational Aids through exchange of information and carrying out join project and training. In addition, countries through PMAWCA are co-operating in training marine pilots and computerization projects.

h) Re-enforcement of port planning

190. The technological advancement in ship design, draught and length as it affects the provision of port facilities has not escaped the minds of port authorities in the region. In fact, it can be safely said that the very current nature of ports in the region has been dictated by ship technological changes. A glaring example is that in the 1960s, there was no container terminal worth its name in the region. However, the coming of containers and container ships forced changes. Less than a decade thereafter, container terminals were constructed all over the region despite the initial resistance in some countries.

191. Since mid 1990s, ports associations had been keenly following the developments in shipbuilding technology through their technical sub-committees. Also, other ship related technological advancements such as dredging ships and cargo handling required were kept in close scrutiny. Their consequences on port facilities carefully examined and information exchanged between ports in order to assist member ports to better plan for the future ships. In 1996, PMCWCA studied all the four major groups of vessels in the trade: -

(a) General Cargo Ships- comprising conventional type of ships, COMBOS, etc.;

(b) Container Ships- started with COMBOS but later went into development of fully cellular container ships. These also developed by generations as follows:

- 1st generation up to 400 TEU
- 2nd generation 400 to 1 100 TEUs
- 3rd generation 1 100 to1 600 TEUs
- 4th generation 1600 to 2 200 TEUs
- Panamax size 2 200 to 3 500 TEUs
- Post Panamax size over 3 500 to 6000 TEUs, super ships or mega vessels

c) Dry Bulk vessels- these are purpose built ships. Smaller ones can be accommodated at general cargo berths. While Panamax and above require specialized terminals with high speed handling facilities;

(d) Liquid Bulk Carriers-comprising:

- Combination carriers, carrying oil/bulk/products and oil/ore;
- Product carriers;
- Medium size crude carriers;
- Very Large Crude Carriers (VLCCs); and
- Ultra Large Crude Carriers (ULCC)

192. The impact of changes in shipbuilding technology on ports in the region can be summarized as: - necessity of dredging to meet the needs of bigger and longer ships, improvements in mechanization of port operations, adapting terminal lay out and equipment to meet the service requirements of the mega ships, up-dating the training modules and increased competition between port with a view to capture the role of a regional or sub-regional hub port, etc.

193. Some major ports have had to improve and a few adapted their port handling equipment in the light of these technological developments. Algeria is a good example in this area. Handling equipment was bought for Djen-Djen port. Modernization of container handling equipment was done in the ports of Algeria, Oran and Annaba between 1997 and 1998. In Nigeria, 1998 was a year when assorted cargo handling equipment were bought. It is on record that 27 handling equipment were acquired. Some of the equipment had handling capacity of up to 42 tons. Dredging had taken place in many port such as Nigeria, Cameroon, Guinea, Mauritania, Angola, Cote D'Ivoire, Tanzania, etc. these and a few more actions were taken in order to accommodate larger and longer vessels as well as for purposes of competition between ports. It must be pointed out, however, that there are still many ports overwhelmed by the cost of rehabilitation and replacement costs. These costs have driven ports ability to finance such projects to the very limit. In fact one of the reasons for success in commercialization processes is not only the inability to manage ports but mainly that of failure to finance essential activities such as modernization of port equipment.

194. Development in port facilities. There is no doubt that the region is fairly well endowed with ports and its related facilities. The region has about 80 major ports. Some portal countries have more than three ports classified as major ports. Massive investments in port facilities were made during the last two decades. In addition, several specialized ports were constructed for fishing and specialized cargoes.

195. So the advent of the "hub and spoke " port concept triggered fears of possible losses on returns on capital invested in ports. Also the concept came at the time of institutional restructuring and reform in many ports not only in Africa but also in most ports of the world. The main reasons for the reforms are to improve port efficiency and to diversify sources of capital inflows. The substantial growth in the seaborne cargo has resulted in most maritime countries to prepare plans of improving and enlarging their ports and terminals. At the same time, port investment requirements have skyrocketed forcing governments to seek much of the investment from the private sector. Meanwhile, there was an idea that port facilities should be consolidated into major ports and feeder ones to avoid duplication of investment into provision of port facilities.

196. Lastly, but not least, there were developments in the technology of ships, particularly fully cellular container ships and the competitive strategies of their

respective operators. By mid 1990s, 4th generation and Panamax size fully cellular container ships were being replaced by Post Panamax or super container ships of more than 5000 TEU capacities. As at June 1996, the largest such vessel was the REGINA MAERSK, with a carrying capacity of 6000TEUs. At that time, bigger vessels of 8000 TEUs had been designed and tested for seaworthiness and economic viability. A revolutionary ship design was already on display, 400 metres long, a beam of 69 metres, with a carrying compliment of 15 000 TEUs, carried 28 rows across and 6 to 7 tiers on top. The consequences of the technological advancement are that every generation requires special port facilities ranging from deeper channels and berths to wider approaches. On the land ward side, specialized shipside cranes are necessary for on board operations, possibly with few stevedores. Therefore, the operating strategies of vessel operators changed with major shipping lines, in this connection, entering into round the world service. This has put ports under pressure to adapt to new ship operators' strategies. Failure to do this would mean being relegated to being feeder ports.

197. The load center concept is particularly associated with container ship operations with regards to seaports. The maritime load centre concept anticipates the development of one or two base (hub) ports on each maritime range, from which these mega ships will call on route to other regions' hub ports. It is further assumed that each hub port will serve its hinterland captive market by relatively small ships on feeder services or rail and road connections. To ensure economic use of the sophisticated port facilities, almost invariably, all major ports in the region are striving to be hub ports. To avoid destructive competition between regional ports, it is voiced in some quarters that the region should deliberately select a few direct global hub ports and classify the rest into spoke ports broken down into regional hub ports, sub-regional main ports, direct call ports and feeder ports. In the modern world of competition, this action may work ports reach a stage of going into mergers and where one-body controls port ownership within a range. Nonetheless, the entrepreneur decisions by vessel operators may well over ride all these port owners' strategies.

198. As it was in the development of containerization since its introduction in the 1960s, the most rational way out is to let the needs of the trade as well as the business strategies of the vessel operators dictate the natural choice of hub ports. If not, the conflict between the regions' choices and that of the free trade, may at the end of the day impede free flow of the international commerce to and from the region.

199. The fact is that, hub ports often select themselves due to a combination of factors such as: -

- Geographical location advantage,
- Substantial capture traffic and a large amount of back-up land,
- Availability of Post Panamax cranes, deep water, etc,
- Excellent direct intermodal connections by rail, road, etc,
- Proven and sustainable high standard of performance,
- Political stability, etc.

200. Looking at the fore mentioned criteria, it is clear that very few regional ports can qualify to be global hubs based purely on economic considerations. Already, indications are that favorite locations are developing to be Mediterranean ports of Europe to service North Africa range, Middle East ports to service Eastern African

range and South African ports to service the rest. This has to do with the round the world service routes explained in the foregoing chapters. Already, one of the major shipping line serving the region, Maersk Sealand, has set up a hub port in Algeciras, Spain, from where African containers are transshipped to other destinations. Lines are applying the same route-planning concept in Eastern Africa.

201. Although port associations of the region have studied this issue, conclusive discussions and decisions have not yet taken place. However, since most ports are being commercialized or privatized, the matter may be less complicated if left in private entrepreneurs to determine based upon sustained excellency and efficiency of port services.

Development of parameters in maritime port

202. The **development parameters** were to: -

- *Increase the productivity of African seaports,*
- *Reduce the time both ships and cargo spend in ports,*
- *Reduce cargo losses due to damage and pilferage,*
- *Reduce port costs per ton of cargo handled,*
- *Improve the maintenance of port equipment so that the down time of equipment is reduced.*

Parameter 1

To increase the productivity of African Sea ports

203. The first line of assessment of port productivity is the total cargo throughput (see Tables 8, 15 and 17). However this does not normally standout alone. Therefore, the total throughput has to be linked to a measure of satisfaction realized by the main users of the port, the shipping lines and traders. Shipping lines are concerned with the reliable and expeditious turn-round of their vessels. Traders on the other hand require safe and timely delivery of their goods. This then takes us to the question of which indicator is the best one. This is a matter, which has been a subject of many studies. All the known indicators have their weaknesses especially when it comes to comparing productivity of ports or berths. Problems of may arise even when comparing similar port in the same country or range and berths in the same port. The good thing though is that comparisons are made despite all theoretical arguments for and against. The most generally acceptable measure of port productivity at a dry general cargo berth is the movement of ship-to-shore gantry crane in terms of moves per gross working hour or net working hour.

204. The UNTACDA II strategies such as improvement of administrative and operational procedures and development of human resources had a great impact on the ports of the region. Due cognizance should be taken of the consequential change in commercial environment in the light of wide spread port restructuring leading to commercialization or privatization. One of the objectives of this change is to improve productivity, which was elusive under government-controlled port management.

Unfortunately, non-availability of data is acute in this area because country reports were not only few on port productivity but were brief and mostly qualitative. The possible cause is that most governments did not see any need of reporting on an activity already out of their hands except to say that ports were "now under private management". Nevertheless, isolated productivity figures showed an improvement in port productivity under the liberalization environment. In February 1992, the Port of Ghana was up in productivity and positive comments appeared in the February 1992 issue of Africa Economic Digest:

"...Container handling rates per crane in Ghana now rival European operators and standards.."

205. So, positive effects of commercialization appeared in the very early years of the Decade period. Port Sudan achieved a rise in productivity from 21.5 tons to 23.5 ton per gang/hour between 1998 and 1999. Mombasa port reported an increase in productivity since commercialization from 10 to 15 container moves per hour representing more than 330 moves per /24hours. Mauritius Port Authority also indicated an increase in port productivity as shown in Table 18. Ports' improvements in productivity in the region were also attributed to other factors like purchase of cargo handling equipment (see Table 19). Improvements in equipment repair policies and schemes were one of the other factors. The upturn was reported in many major ports of the region since commercialization took effect. The lack of adequate berth throughput figures makes it impossible to indicate possible benefits in monetary terms except to say that should this trend continue, the region would save a lot of money through this improved port productivity.

Parameter 2

Reduce the time both ships and cargo spend in ports

206. Almost all the strategies were aimed at improving the flow of ships and cargo at berth. The reduction in the time that ships and cargo spend, in normal operation, signifies a fluid port. Ships and cargo can spend time in port for various reasons. The port productivity could be poor, customs clearance could be slow for reasons including long procedures, port health problems, poor off-take, attitude of portworkers from all stakeholders in the port such as police, lorry drivers, etc. To reduce, sustainably, the time ships and cargo spend in port needs the participation of all stakeholders and their respective employees. This includes the shipping lines, the shippers and their respective agents. However, for the sake of relating to the ANTACDA II project, the emphasis had mainly been on productivity at the terminal as determined by managerial excellence, portworkers attitudes and customs procedures. The three areas were adequately tackled through various seminars, workshops, and symposiums. This was mainly successful in the environment of liberalization explained in the foregoing paragraphs.

207. The degree of success could be different but the momentum is on and needs to be enhanced. In the July 1992 issue of Seatrade review, the port of Ghana, which was amongst the pioneers of commercialization and privatization processes, was commended for quick turn round of ships:

"Tema...the main port of Ghana now turns vessels around at a productivity rate equal to those of major European ports."

208. So by 1992, few ports were already performing well enough to be compared to the major ports of Europe. Since privatization in the 1980s, productivity at Tema Port Ghana steadily improved the turn round of ships, from 17 days in 1983 to 3.5 days in 1987. The improvement reached to a turn round time of 2 days in 1994. The increase in productivity in moves per hour indirectly means ship turn round was improving as shown in Table 16 and its Chart above. It is in rare cases that productivity at the berth could rise without a corresponding reduction in the time ships stay in ports. However, in the case of cargo, it is could happen most probably due to bottlenecks in off-take, many times beyond the control of the port authorities, like failure by the trade to pay port charges or customs duty. For instance, the improvement in productivity in Mauritius eventually led to improvements in turn round of ships at that port. Same thing happened at Massawa Port. When port productivity improved, the turn round time of ships also began to improve though not directly proportional. The lack of adequate information regarding cargo movements at berth and port off- take rates makes it difficult to make any conclusions on the effects of the reported increases in port productivity on the actual time cargo spent in port.

209. There were, therefore, improvements in ship turnround and time cargo spent in port due to the execution of activities of the Decade program. Having said this, it must be pointed out that the improvement in productivity is still far from the international rate of productivity, which allows for a maximum ship turnround time of only a day. Also the improvement is mainly restricted to those ports which embraced liberalization policies. There is more room for improvement.

Parameter 3

Reduce cargo losses due to damage and pilferage

210. This is an area of port security of cargo, which is of major concern to port authorities. Damage of cargo is a cost to the ports through increase in claims and insurance premiums. One of the reasons given for the introduction of container boxes in 1970s was reduced damage to cargo. Indeed damage reduces as the rate of container penetration rises in a region. Since mid 1970s when containerization began to be prevalent, the problem of cargo damage began to subside but not enough to remove it from the list of port problems. Also, the problem of theft reduced because of the difficulty of stealing the whole container box. However, theft in general, led to ports erecting expensive perimeter fences, improved gate access controls, proper lighting at night and training port security personnel. What is now remaining at the top of the list is cargo pilferage from containers by port workers, some times, in collaboration with outsiders including the very cargo owners. Nevertheless, pilferage and damage of goods in container is one problem but this does not help the situation very much because of the fact that there is still a large portion of cargo not containerized.

211. **The subject of pilferage was a subject of discussion at the 1998 meeting of PMWCA. The report of their meeting summed up the issue as follows: -**

"Pilferage has always been the headache of all port manager. However, the extent of cargo pilferage varies form one port to another. It may be advisable for the Committee to consider studying the various security systems in our sub-region and even in other parts of the world and coming out with suggestions in improving the safety of cargo in our ports."

212. The development of human resources strategy would certainly have assisted in reducing cargo damage and pilferage by ensuring that port workers change attitudes to their job. Statistical data and information on cargo damage and pilferage needs to be collected in order to deal with the matter at regional and sub-regional level.

Parameter 4

Reduce port costs per ton of cargo handled

213. To calculate the cost per ton of cargo handle in port requires investigation into all aspects of port activities to either come up with gross or net costs at berth. Although the application of strategies such as (a), (c), (e) and (f) should have reduced port cost per ton of cargo handled, the lack 0f data makes it difficult to make any conclusion.

214. It must be made very clear that the data needed for such calculations cannot possibly be found in country reports. This required field studies of the flow of cargo through the various stages of port throughput, including the rate of off-take, export cargo receiving policy, etc, in addition to the activities at berth.

Parameter 5

Improve the maintenance of port equipment so that the down time of equipment is reduced.

215. Maritime port strategy (e) was directly aimed at achieving this indicator. The problem of foreign exchange had been tacked at most major ports due to the on going liberalization process. **However, country reports did not provide quantitative data. In any case, most of the projects in this category were not implemented. The position of lack of data here is as explained in parameter 4 above.**

CHAPTER V

THE IMPACT OF UNTACDA II ON

THE DEVELOPMENT OF MARITIME TRANSPORT

216. The long-term objectives of the maritime shipping transport and maritime ports as defined in the Decade program are: -

The development of the shipping capacity of Africa by re-inforcing co-operation, intensifying consultation and strengthening policy co-ordination with a view, inter alia, to achieving greater participation in international shipping activities, thus contributing significantly and positively to an accelerated economic development of African countries and,

To increase trade efficiency by improving the performance of African ports

MARITIME SHIPPING TRANSPORT

217. The maritime sub-sector had 40 projects under ANTACDA II program. 3 were abandoned leaving a total of 37 projects. As explained above, 7 countries had a total of 10 projects and one abandoned leaving 9 projects. 5 countries reported on their maritime transport projects representing 6 projects. Sub-regional and international organizations had 30 projects in this sub-sector and two were abandoned leaving 28 projects. UNCTAD reported about its 6 (including two abandoned) projects. The rest did not report about their projects, 24 out of 28 projects. However, a few projects were completed before 1997. Unfortunately, most major projects relating to actual capacity building in the provision of shipping transport equipment and services were all abandoned. Technically, there was not enough activity to significantly improve this sub-sector. Most of the activities reported happened to be the industry's activities outside the Decade program.

218. However, it must be noted that the provisions of ANTACDA II, in this connection, had inspired and influenced the West and Central African sub-region to seek alternative means of raising funds for shipping transport projects. Also, the sub-region has co-operated in commencing action towards setting up a regional coastal line called ECOMARINE.

219. Furthermore, a few shippers were established and based upon the ideals of the UNTACDA II projects. Reform of shippers' councils was under taken, particularly in West and Central Africa. Regional co-operation was achieved in the activities of UASC. UASC spearheaded the reform process of shippers' councils in the region in collaboration with PMAWCA.

220. The activities of UNCTAD in the provision of training contributed to the development of human resources in the region. The TRAINMAR program at regional and national level had contributed to the improvement and utilization of human resources. Furthermore, UNCTAD delivered short-term courses for Middle Managers called the Port Management Certificate. The ACIS program was successfully applied in many ports in the region. These initiatives had contributed to the improvement of operational efficiency and service quality of transport operators and provided databases permitting transport operators to better plan and manage their investments. This also contributed towards the reduction of cost of delays, which often affect operators of shipping services and cargo concerns

221. In the area of cost reduction, efforts were made by regional, sub-regional and national organizations to assist landlocked countries in reducing their overall costs. It is quite clear that without those activities, the regions shipping bill could have been much higher than that.

222. In the area of the development of human resources, a lot of training activities were undertaken many times outside the UNTACDA II projects but have been reported by countries. Unfortunately, countries did not give figures of people trained. National shipping lines undertook national programs. The most elaborate country report came from Ethiopia. The Ethiopian Shipping Lines Corporation (ESLC) had 306 seagoing and 115 shore-based permanent employees at the beginning of UNTACDA II. At the end of the Decade, ESLC had 288 seagoing and 124 shore-based permanent employees. During the period, ESLC had given training to 276 seagoing personnel, out of which 178 were trained abroad. 107 shore-based employees were also trained and 10 of them were trained abroad. It is a well-known fact that many countries had trained their nationals within and abroad. However, the country reports did not mention any thing about this matter. The lack of supporting information and data is still a critical problem in the evaluation process.

223. Another area where the Decade had an impact was the evolution of appropriate commercial shipping environment to allow private participation in shipping. The seminars and workshops, in this connection, were very effective in influencing change of policy towards commercialization and privatization in the region.

Maritime Ports

224. The maritime port sub-sector had 37 projects under the UNTACDA II program and 1 was abandoned leaving a total of 36 projects. 14 countries had projects in this sub-sector representing 28 projects. 10 countries reported on the status of implementation of their maritime port projects representing 19 projects. Sub-regional and international organizations had 9 projects and 1 was abandoned leaving 8 projects. 2 (including 1 abandoned) were reported on. The main overall objective of UNTACDA II in this sub-sector was to increase trade efficiency by improving the performance of African ports. Although the full impact of the activities undertaken under the Decade may take sometime to fully manifest, so far, there are indications from preliminary results, there are improvements in some areas of port activities. Sooner or later, this will result significant increase in the overall performance of the African ports.

225. Already, the activity on commercialization in co-operation with ports association have shown positive results in that most ports are in the process of commercializing or privatizing port services. The productivity in those ports that have done partial or complete commercialization has shown a rise in productivity at berth from an average of 8 moves per crane/hour to 15 moves per crane/hour and this trend is expected to continue rising.

226. Furthermore, activities relating to harmonization of port tariffs and simplification of port clearance procedures are beginning to bare fruit in that port procedures in a few countries have been reduced and the process of simplification is going on. In some cases port documentation has been reduced from 13 stamps to 4. The next target is to achieve a one-stop clearance system. Port tariffs are being simplified and made customer friendly. All this will sooner or later result in the reduction in port costs and turn round of ships.

227. The dredging and rehabilitation of navigational aids projects had the impact of allowing quick and safe entry of ships into ports and reduction of ship related waiting time. In some ports, night navigation has been made possible thereby by reducing ship

turnround time in such ports. The overall effect would take some time to manifest in actual time and money saved because other parties like customs and health personnel are yet to change attitude to their work in ports.

228. The activities related to the non-recurrent publications on "Challenges facing the African ports in the next millenium", and the seminars that followed its publication, have greatly influenced the ports in the region. The reform of port associations is in the process. Management of port associations has put in place training schemes for personnel, data collection and data banks. And c-operation between port associations had been enhanced to the extent of a recommendation being made in 1998 to the effect that the ports associations in the region should further co-operate and form a Pan-African Association for Port Co-operation (PAPC). The latest development is that port associations launched PAPC on 29th June 2001 in Lome Togo. One of the objectives of PAPC is to contribute to the gradual integration of the three port associations now existing in the region.

229. On matters of port safety, UNTACDA II had enormous effect on the region portal countries, which led to preparation and signing of MOUs on port state control on the Atlantic and Indian Ocean seaboards. In this regard, countries will co-operate, inter alia, in insuring that ships which pause safety and security risks are made to rectify there defects. The sub-regions need to be assisted in the actual implementation of these MOUs.

230. Various meetings, seminars and workshops were held aimed at assisting the landlocked countries in their efforts to reduce transit transport costs. Strategy implementation has been put in place and modalities of co-operation between corridors on all major seaboards were agreed. One of the areas is, of course, the improvement in the speed and care of cargo in ports and the provision transit facilities in ports. Therefore, the activities of UNTACDA II, in this aspect, were positive and it seems that more will be achieved in the period beyond the Decade because many port activities are on going.

CHAPTER VI

IMPLEMENTATION OF THE FRAMEWORK OF ACTION APPROVED BY THE CONFERENCE OF MINISTERS IN 1997.

MARITIME SHIPPING TRANSPORT

231. The Plan of Action approved by African Ministers of Transport and Communication in 1997 in the field of Maritime Shipping Transport comprised of: -

- Preparation of a report on the status in Africa of major maritime conventions which are of importance to African countries for dissemination through national and sub-regional seminars and assistance to member states in the integration and implementation of these conventions,

Action towards the preparation of the report has stated. It is expected that the report will be completed by the end of 2001.

- Continued institutional reforms of the shipping sector taking into account the directives of specialized organizations such as CEMDAC. In this regard, efforts should be made to organize national and sub-regional workshops on the implementation and application of major maritime transport conventions of relevance to African countries,

This will follow after the report on status of major maritime conventions mentioned above is completed.

- Continued improvement of human resources after a proper evaluation of shipping needs.

It was not done.

232. Generally, the implementation of the Plan of Action had begun at the very end of the Decade period. The work so far done in this area is less than 10 percent.

Maritime Ports

233. In this sub-sector, the Plan of Action approved by African Ministers of Transport and Communication in 1997 comprised: -

- *Organization and conducting of ports commercialization workshops in co-operation with sub-regional port management associations,*

This activity was successfully executed. Workshops were organized and conducted in Maputo, Dar- Es Salaam and Mombasa. The deliveries have had direct influence on the current level of commercialization in the region.

- *Establishment of policies and measures for combating pollution in African ports,*

Actions are being taken at regional and sub- regional level. Priorities in this area have been worked out and projects have been submitted to IMO through the ITCP.

- *Non-recurrent publication on challenges facing the African ports in the next millenium,*

The publication was prepared and used extensively in workshops and seminars in the region as well as overseas. It inspired many ports into preparing themselves for the expected new millennium challenges.

- *Sub-regional seminars on port safety and efficiency,*

Action is being taken in collaboration with IMO and UNCTAD as above.

- *Sub-regional seminars on improvement of human resources for the management of ports,*

No action was taken.

- *Improvement of infrastructure in port and warehouses serving landlocked countries in Africa,*

Action was taken through several Transit Transport Corridors' seminars at sub-regional level. Many activities in this area are on going through port associations and transit corridors secretariats.

- *Development of common sub-regional policies for dredging,*

The port associations in the region have done some work towards the attainment of this goal. As yet no common policy has evolved. Ports have carried out many studies on this subject and exchanged the information amongst them for dredging purposes. There are ports that have to dredge yearly and those who do it as and when necessary. Both groups benefited from ports associations' endeavors in this area. Some ports can now have 24-hour navigation, as the port channels had become much safer to sail at night.

- *Co-operating with port management associations in the design of ports data-bases,*

All the sub-regions are in the process of establishing databases. The PMAESA was assisted in the collection, presentation and harmonization of port productivity indicators.

- *Supporting transit and landlocked countries in the establishment and operations of inland dry ports,*

It was done in transit transport seminars held in the region. Seminars were jointly organized by ECA and sub-regional organizations.

- *Delivery of TRAINMAR workshops and seminars in Africa, including the development of TRAINMAR centres, teaching materials and faculty for various African sub-regions,*

TRAINMAR deliveries were carried out in some countries. The development of teaching materials was going on by the end of the Decade.

- *Financial contributions and collaboration of landlocked countries in the design and construction of the infrastructure,*

Attempts are being made to assist land locked countries at bilateral basis. However, financial contributions and collaboration envisaged by African Ministers has not yet materialized.

- *Minimizing port passage charges.*

Efforts in this direction have been going on through ports associations. Tariff harmonization and review processes were going on by the end of the Decade.

234. The sub-sector Plan of Action on Maritime ports, outlined above, was more successfully implemented than the Maritime Shipping Transport one. Approximately 60 per cent of the African Ministers directives were implemented.

CHAPTER VII

PROPOSALS FOR FUTURE ACTIONS

MARITIME SHIPPING TRANSPORT

235. The region's aspirations for significant participation in both the liner and bulk shipping services were not attained during the Decade period. In the liner service, participation declined. The provision of coastal shipping services still presents enormous problem which are being discuss and may probably find a solution in this new millenium. The level of tonnage chartering for bulk shipping could not be regionally determined but indication are that not more than 20 per cent of the region's bulk cargoes are shipped in region vessels or in chartered ones. In addition, implementation of ANTCDA II projects relating to maritime transport had been dismal. On the other hand, the cost of carriage of goods by this mode of transport has been going up and constitutes a larger portion of their c.i.f. value than in developed market-economy countries. The aspirations of the region well articulated in ANTACDA II program yet remain mostly unimplemented at the end of the day.

236. Therefore, the way forward lies not in repeating the same recommendations for decades but identifying the reason why such a sub-sector, which is generally, known to be the backbone of movement of international and regional trade should be neglected in Africa. The main problem could be the lack of awareness of its real significance and hence low priority has been accorded to it. **Future actions should emphasize the following: -**

- Creating and enhancing awareness of the significance of maritime transport at regional, sub-regional and national level, through presentation of seminars and workshops. The cost of this mode of transport should be accessed by country and then consolidated regionally. Senior decision-maker should be made aware of the implications of neglecting this sub-sector. Intergovernmental organizations may be requested to provide assistance with implementation on the organization of awareness campaigns,

- Carefully scrutinize the level and/or qualities of maritime services provided by national fleets and compare them to those in developed markets-economy countries. The reason being to avoid repeating the mistakes of the past decades and determine any modifications that may be required to improve the performance of existing services,

- A comprehensive assessment of the needs of the region in this sub-sector should be carried out in the area of the type, regularity and speed and of service, and man power and equipment levels needed,

- Completing the process of reform and commercialization in this sub-sector. In this connection, a process of strengthening and integrating the existing maritime shipping transport organizations or institutions should be carried out,

- The countries should also take measures to create an appropriate environment for the development of marine transport services by enacting anti-trust laws and regulations to govern fair competition in maritime shipping transport below.

Maritime Ports

237. Although there has been considerable investment in port infrastructure and in few modern terminal facilities in the past decades, the reputation of African ports as being notorious in the provision of low output has not changed significantly. The handling capacity is generally poor compared to other regions. The development of new facilities to meet the requirement of bulk and large unitized shipping has been slow. In many ports there is little or no competition for the provision of cargo handling and other services. At many ports, cargo is still basically handled at conventional berths, slowly and inefficiently. Where new infrastructure has been provided, performance is still below international standards; plant and machinery is poorly maintained; manning levels are excessive; these add to inefficiencies and high cost of handling.

238. Therefore, the **way forward** is proposed as follows: -

- Speeding up the institutional reforms and liberalization processes going on in the sub-sector, as this will allow the emergence of private terminals and private terminal operators. This will not only enhance competition, but would also attract private investment,

- Radically moving beyond rehabilitation, refurbishment, repair and maintenance and develop new terminals to meet the demands of modern vessels,

- Completing and enhancing the creation of a new relationship and partnership between transport and distribution providers and users leading to the development of integrated systems,

- Strengthening the existing port organizations or institutions in order to achieve continuity and sustainability of the improvements attained through the Decade.

CHAPTER VIII

CONCLUSIONS AND RECOMMENDATIONS.

MARITIME SHIPPING TRANSPORT

239. The on going process of globalization and liberalization of national economies have greatly enhanced the scope for inter- and intra-regional trade and tourism. This has created significant demands for efficient and well-integrated transport infrastructure and services to enable countries to participate in the development processes effectively. Maritime shipping transport is one of the major transport modes for carriage of inter- and intra-regional trade. More than 90 per cent of the world trade goes by sea. Therefore, the facilitation of this transport sub-sector is crucial not only to the regional economy but more so to the world economy in this era of globalization and liberalization. Within the region, between 92 - 97 per cent of the regions' international trade is carried by maritime shipping transport.

240. In spite of the existence of the UNCTAD Code of Conduct for Liner Conference formula of 40: 40: 20, and also the fact that many African countries are party to it, the participation of the region in shipping has not improved significantly as anticipated. Furthermore, the elimination of conferences in West Africa did more harm than good to those National lines, which were already weak, as they were technically eliminated from the trade due to high competition form large and well-financed foreign lines. Therefore, there was a general decline in the fleet of the region.

241. The results achieved by majority of Africa fleets in 1990/91 when the fleet level was 7.3 million dwt did not match the expectations voiced at the time they were formed. The total fleet declined over the period from 7.3 million dwt to 6.03 million dwt for 1990 to 2000 respectively. That represented a decline of 17.1 percent. The combined general cargo and container ships also decreased from 2.34 million dwt to 1.8 million dwt between 1990 and 2000 respectively. That represented a decline of 23.1 per cent. However, the container ships fleet, though very small in size, increased from 0.04 per cent in 1990 to 0.2 percent. Indicating a decline in general cargo ships and the lack of significant fleet modernization.

242. The important phenomena here is that whereas the combined general cargo and container ships which are used in the liner trade declined, the dry cargo increased from 198.0 million tons to 233.0 million tons between 1990 and 2000 respectively representing an increase of 18.0 per cent. Applying a combined general cargo and container ships' productivity factor of 6.09 tons per dwt, their share of the total traffic attributed to them in 1990 was only 7.4 per cent. To fully comply with the UNCTAD Code formula of 40: 40: 20, in 1990/91, the region needed a combined general cargo and container fleet level of at least 13.0 million dwt. In the year 2000, the productivity factor for similar category of ships was 6.42 tons per dwt. Having noted that the combined fleet of general cargo and container ships had declined by 23.1 per cent, the liner trade share of the African fleet was only 5.0 per cent of the total region's liner trade. To carry up to the maximum provided for in the Code, Africa needed a general cargo fleet of 14.5 million dwt. The decline in the share was mainly due to heavy shading off of general cargo ships by the three Maghreb nations of morocco, Libya and Tunisia as were as the two West African countries of Nigeria and Ghana. In North Africa, Egypt significantly reduced its general cargo fleet. Table 16 shows how the major maritime nations of Africa performed over the period. Libya, Tunisia, and Morocco reduced their general cargo fleets by 91 per cent, 50 per cent and 26 per cent respectively. Ghana and Nigeria reduced theirs by 76 per cent and 53 per cent

respectively. Egypt reduced its fleet similar fleet by 19 per cent over the period. Therefore, no anticipated equitable participation in liner shipping was achieved. On the contrary, the African share of the liner trade is lower now than it was at the beginning of the last decade.

243. In Bulk shipping, total liquid and dry bulk cargo increased while the tanker and bulk carrier fleet decreased in the region. In 1990, the productivity figures for Oil tankers and Bulk carriers were 5. 96 tons and 3.29 tons per dwt respectively. Those of end of 1999 were 6.65 tons and 3.03 tons per dwt for Oil tankers and Bulk carriers respectively. By direct interpolation, the share of the regions' Oil tankers in the total African Crude oil carried in 1990 was only 4.0 per cent. Similarly, the share of Oil products was only 0.8 per cent. The region, therefore, needed 32.2 million dwt and 7.0 million dwt of Oil tankers and Bulk carriers respectively to carry about 50 per cent of the total trade. Crude oil fluctuated from 1990 to 2000. Whereas total Oil products decreased due to the fall in the products loaded over the same period. Meanwhile, Oil tanker fleet declined significantly whereas the Bulk carrier fleet increased steadily over the same period. The result was that the share of Crude oil carried in African bottoms declined form 4 per cent in 1990 to 2.4 percent in 2000. However there was a remarkable increase in the Oil products carried in African bottoms form 0.8 in 1990 to 10.2 percent in 2000. To carry about 50 per cent of the cargo, the region needed at least 34.0 million dwt and 7.0 million dwt of Oil tanker and Bulk carrier fleet respectively.

244. The complexity of the matter is that chartering could increase this tonnage. Algeria has reported that her carrying capacity had nevertheless increased to 20 per cent of the trade through chartering. This could have been true for other countries but there is no information to confirm it. Therefore, it is difficult to conclude that there was a major improvement in the carriage of bulk cargoes from the region as intended by the UNCTAD Resolution no. 120 (v).

245. The maritime shipping routes are mainly developed to suit the demands of the main trade links particularly, the transatlantic, transpacific and Europe-Far East routes. Many shipping lines operating round the world service are no longer providing direct services to the region as a whole due to the inability and inefficiencies in handling the mega vessels in ports. Direct mainline shipping services between countries in the region are poor. There are just a few services from North Africa to West and Central Africa and East and Southern Africa. Coastal, short sea and intra-regional services are otherwise poor. **The possible reasons for these deficiencies are: -**

- Insufficient initial traffic volumes to facilitate development of economically strong services and to sustain an acceptable frequency. This leads to a lack or reduced range of services outside the main shipping net works,

- The increasing development of "hub" and "spoke" ports arrangement to realize economies of scale in shipping, means that mega ships have avoided taking African ports to be hub ports because of the inefficiencies mentioned above and cargo volumes are insufficient to justify direct calls by large main line vessels,

- Lack of regional and sub-regional coastal shipping services resulting in poor inter- and intra-regional connections,

- The failure of the national merchant marine to contribute in providing significant volumes of shipping services at the inter- and intra-regional level.

246. Concerning coastal shipping services, it should be further noted that there has been little change in the position since the beginning of the Decade. There was lack of

co-operation between countries on this subject. Furthermore, there was lack of interest in coastal trade by shipping companies of the region except the North African lines. This explains the lack of traffic agreements between member states.

247. Regarding the cost of transport, it is generally true that the cost of transport is relatively high for traders in some developing countries than in developed market-economy countries. That is in terms of "generalized transport costs", consisting of expenditures, costs of aggregate transport time and costs arising from loss, damage, delay and the risk there of. Statistics show that ocean freight rates for developing countries are nearly double those for developed markets-economies. In addition, developing countries are more likely to pay for transshipment services, which in some trades is inevitable due to low volumes of cargo. This region's rates are amongst the highest between the developing countries.

The reasons for the high cost of freight rates are: -

- Traders lack of knowledge of shipping practices,
- Lack of bargaining power to negotiate favorable rates by traders in the region who ship in relatively small liner cargo consignments,
- The volume of international trade on some routes is relatively small and imbalanced between exports and imports to provide the economies of scale obtained on routes linking the main trading centers,
- The lack of direct services between some countries in the region means that traders have had to pay for transshipment costs,
- The costs of handing in ports and delays to vessels in the region, contribute significantly to shipowners' voyage costs, prompting them to set high freight rates,
- High risks insurance premiums due to political instability and other uncertainties influence the setting of high freight rates.

248. The status of implementation of maritime transport projects indicates low priority accorded to provision of maritime transport services. Whereas there is over tonnaging at world level, the region is in need of service well tailored to its trade needs.

249. It is, therefore, **recommended** that the region should: -

(a) Complete the liberalization of the sub-sector, where participation in the provision of shipping services was regulated,

(b) Proceed with the implementation of the UNCTAD Code of Liner Conferences and the UNCTAD Resolution no. 120 (v),

(c) Promote the development of entrepreneurial skills of local people and encourage regional co-operation to establish commercially viable regional/ short sea/ feeder service/coastal shipping services through mergers or joint ventures. Governments should ensure that investment inducements are provided to encourage the setting up of shipping services and specifically encourage the private sector to invest in shipping,

(d) Continue supporting the development of human resources and an evaluation of the regional training need in maritime transport must be carried out,

(e) Promote NVOCCs and encourage chartering of vessels and slots on vessels to supplement the activities of national lines. In this connection, training in chartering skills should be provided at national and sub-regional level,

(f) Promote containerization and door-to-door services. This would reduce handling to the minimum and thereby contribute to the reduction of freight rates to and from the region which, in turn, would reduce the cost of maritime transport,

(g) Establish, strengthen and develop shippers' organizations and build their capacity to negotiate favorable rates with shipowners. They should also negotiate for adequate services for commodities with special transport needs,

(h) Encourage co-operation between shippers to consolidate LCL shipments for economy and convenience and to negotiate better rates,

(i) Promote the exchange of information and market intelligence between shippers to identify opportunities for co-operation in obtaining shipping and other transport services. Databases for maintaining information on available shipping services, should be developed,

(j) Assist shippers, acting together, to discuss their South-South transport needs with local companies, ship operators and entrepreneurs interested in investing in shipping,

(k) Encourage shippers to enter into agreements on the minimum quantities required to be shipped to justify establishment or improvement of services,

(l) Create capacity in the region for the countries to incorporate international maritime conventions into their national laws and implement them,

(m) Assist in restructuring ISCOS to play the same role in East and Southern Africa as MOWCA in West and Central Africa.

Maritime ports

250. Seminars, workshops and symposiums held in the region had been successful in so far as assisting in changing the otherwise entrenched poor work attitudes and the introduction of commercialization and privatization processes in the ports. Also, strategies for marine pollution control and port state control have been put in place. Tentative figures show that those countries that embraced and implemented liberalized policies achieved higher port productivity than those who did not.

251. Information is power. Despite the development of information technology, the information shared between ports in the region is limited. During the Decade period, port data banks were established at national and sub-regional level. Data banks have been established in several countries in West and Central Africa sub-region and a sub-regional one at PMAWCA Secretariat. Ports associations of other regions in collaboration with ECA have initiated action aimed at harmonizing collection systems and calculation of port indicators.

252. It is, therefore, **recommended** that: -

(a) Concerning port productivity, the ports should be systematically liberalized to allow movement of private investment in sub-sector, private terminal operators and competition to encourage efficiency,

(b) The management organization systems of many ports needs to go through a rigorous review, form time to time, in order to incorporate modern management principles and practices, and to enable them to respond promptly and effectively to changes in maritime technology and commerce. In this context, special attention should be given to:

♦ Preparation of guidelines to assist ports to adopt modern organizational structure and modern management practices'

♦ Preparation and presentation of workshops to explain to policy makers and senior decision-makers, new management practices and to promote the need for change,

♦ Assist in application of modern management philosophy, change of attitudes and approaches. A much more commercial, customer-oriented approach is required throughout the organizations, and all departmental activities must be firmly based on cost/revenue principles,

♦ Establish an effective management information system (MIS) to cover financial and cost reporting, operating and engineering performance, manpower data and other areas,

(c) Where possible, the region should encourage the development of new specialized terminals with enough capacity to handle the trade of countries. Invest in new handling equipment. Convert and adapt existing obsolete port capacity to new uses,

(d) Document handling speed should be given some special attention. A major constraint here is the complexity of document handling in the region. The quick and efficient turnround of ships and expeditious cargo off-take depend to a large extent on the speed and ease of document handling,

(e) Cargo care schemes must be established to minimize cargo damage and pilferage,

(f) Maintenance management and manning levels must be improved,

(g) Ports must be encouraged to establish efficient interchange facilities and well planned supporting services such as freight consolidation centres or freight villages. Here, arrangement of complimentary activities like packaging, grouping, packing into containers, documentation, stock holding, etc, could be offered,

(h) Ports should consider reviewing their strategies of assistance to landlocked countries' customers to include provision of free zone areas on BOT and BOO bases,

(i) Training capacity in the area of ports should continue and be intensified in order to improve the professional skills of port employees and as a means of improving efficiency and providing sustainability. ECA, UNCTAD and ILO should continue to

co-operate in this area. ECA and UNCTAD should continue co-operation of the provision of TRAINMAR courses at sub-regional level. Also, ACIS should, where possible be extended to all modes of transport, interfaces and equipment to allow the interchange of information and to make the best use of assets,

(j) The management and policy-making abilities of port associations should be improved. Efforts must be made, in this connection, to harmonize their activities through PAPC and other sub-regional and regional organizations,

(k) Regarding pollution and pollution control, ports must support the IMO initiatives put in place through ITCP,

(l) The sub-regional MOU on port state control should be harmonized and regular meetings co-ordinated by ECA in collaboration with sub-regional organizations and IMO should be held. Also, the regions should be assisted to implement the MOUs,

(m) Sub-regional and regional co-operation seminars should be organized and presented, aimed at senior executive and designed to promote regional co-operation. This would also provide forum for exchanging experiences in various areas of port interests like: creation of freight centres, load-centering, development of data banks and electronic information systems, regional training policies and strategies, port competition and commercialization,

(n) Ports should consider establishing a port development fund to assist in quick implementation of projects at sub-regional level,

(o) Reform the co-operation mechanism between port authorities, customs authorities, health authorities and other port based operators so as to expedite the movement of cargo through ports,

(p) The existing customs practices should be further reformed in order to expedite the movement of cargo in ports by adopting modern business process re-engineering techniques to identify inefficient and/or redundant activities for streamlining or elimination. It is further suggested that customs authorities should:

♦ Urgently examine their existing practices and institute a program of reform for those procedures that are identified as inefficient or redundant. Reference should be made to existing international conventions on customs process simplification and harmonization (the Kyoto Convention of the CCC). This should be undertaken with national trade and transport interests, including ports, to ensure full co-ordination of carrier, port and customs controls,

♦ Make maximum use of information technology to assist them in the efficient performance of their duties. Computer applications like ASYCUDA, ACIS, etc should be exploited and modifications made to achieve compatibility with other systems used else where in the world,

♦ Examine closely the possibility of separating the process of goods release from the process of revenue collection, accounting and statistical reporting,

♦ Use risk assessment, profiling and selectivity techniques to identify high-risk consignments for physical examination and keep its proportion of physical examination to a minimum, consistent with accomplishment of objectives,

(q) Governments should take steps to ensure the highest level of integrity and professional standards within their customs service. The measures identified by the

CCC Arusha Declaration on integrity in customs should be implemented. Effective penalties are also required to discourage low standards of integrity in the trading community,

(r) The initiative to promote cruise shipping through port associations, should be encouraged and work being done in the Indian Ocean seaboard be used to promote same on the Atlantic Ocean seaboard.

Annex 1.

List of Reference documents

1. Review of Maritime Transport, 1990-2000, UNCTAD.

2. Comparative Transportation Cost Analysis in East Africa, Technical Paper no. 22, April 1997, USAID.

3. Port Management Association of West and Central Africa (PMAWCA), various reports of their meetings, 1991-1998.

4. Mauritius Port Authority Annual Report, 1998/99.

5. "Naval", African Port and Maritime Director, 2001.

6. Recommendations and Guidelines for Trade Efficiency, UNCTAD, 1994.

7. Report of the first preparatory meeting of the development of flag and port state capacities in the Indian Ocean, Mumbai, India, October 1997.

8. UNCTAD Monographs on Port Management no. 6

9. Third preparatory and signatory meeting on the development of flag and port state capabilities in West and Central Africa.

10. Treaty Establishing the African Economic Community, 1991.

11. Ports and Harbors, April 1998, Vol. 43, no.3

12. Transport and Communications in sub-Saharan Africa: Strategies for Human Resource and Institutional Development, July 1991.

13. Cargo Systems: Port, process, players and progress, 1996.

14. Port Management of Association of Eastern and Southern Africa (PMAESA), various reports.

Annex 2

Terms of reference

Maritime Transport Consultant

- Carry out desk study and review all data available in ECA on UNTACDA II covering maritime transport ;

- Prepare draft evaluation report covering maritime transport, for review first by the Team Leader and also by RCID Experts. The coverage and content o modal reports to be prepared are as proposed under Annex IV (reproduced below) ;

- Finalize the draft report by incorporating comments from the Team Leader and RCID Experts ;

- Duration of the assignment is two months starting from 20th June 2001.

Outline of Modal Reports

- Introduction,
- Summary,
- Overview of the current status of the sub-sectors,
- Review of the modal strategies as adopted in 1997 against the parameters,
- Status of implementation and financing of the projects in the sub-sectors,
- Description of problems and difficulties experienced,
- The impact of UNTACDA II in the development of the sub-sectors,
- Extent of implementation of the Plan of Action approved by African Ministers in 1997,
- Proposals for future actions in the development of the sub-sectors,
- Conclusions and recommendations.