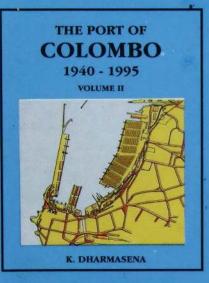
THE PORT OF COLOMBO

1940 - 1995

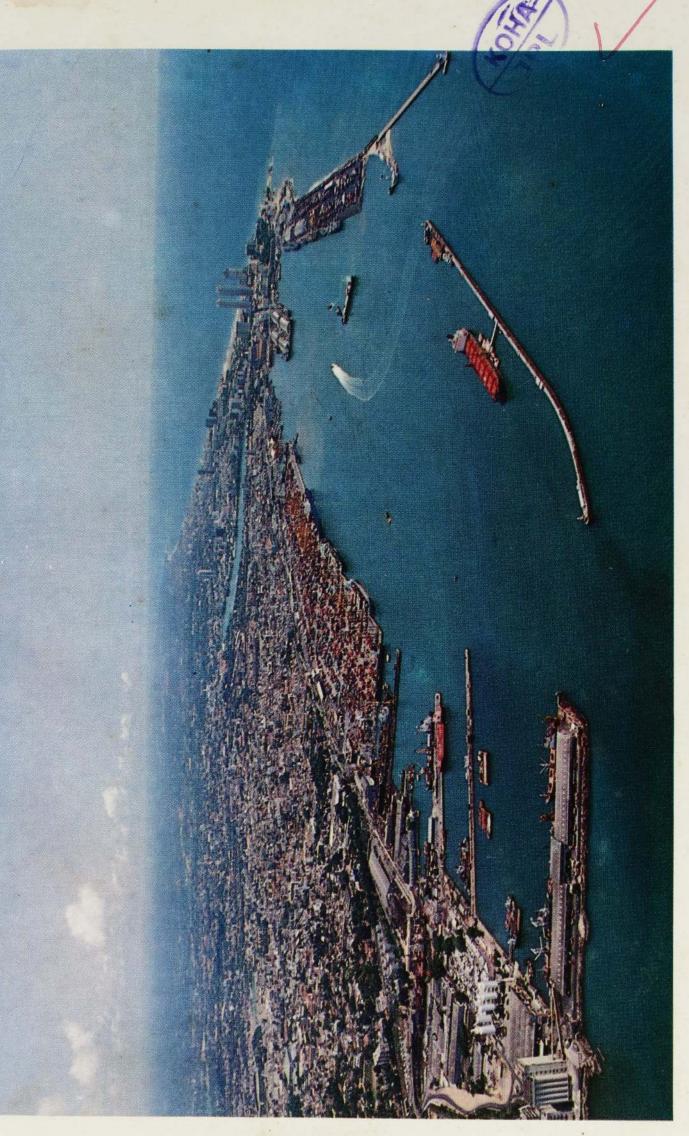
VOLUME II





The Port of Colombo, 1940 - 1995 Volume II authored by Professor K. Dharmasena, an eminent researcher in Port studies in Sri Lanka, presents a valuable academic contribution of the subsequent developments in the same area of studies. Covering the course taken by Sri Lanka's premier port from 1940 - 1995 it deals comprehensively with its many vicissitudes over the greater part of the post independence period tracing it to its final elevation as the leading port in South Asia. Such a development, in the writer's opinion could be attributed to, among other things, to the role of the JCT (Jaye Container Terminal) which served as a powerful catalyst in the process of port development.





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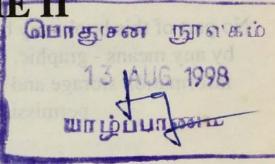
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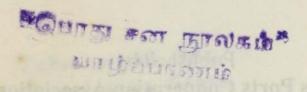
VOLUME H

மாழ்ப்பா**னம்.** வாழ்ப்பா**னம்.**



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JAPAN OVERSEAS PORTS COOPERATION ASSOCIATION (JOPCA)
TOKYO

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Japan Overseas Ports Cooperation Association (JOPCA)

Tokyo

Printed by Sarvodaya Vishva Lekha, Ratmalana, Sri Lanka. Humbly dedicated to the memory of Lalith Athulathmudali who as Minister of Trade and Shipping (1977 - 1989) used his ingenuity and foresight to elevate Colombo to the premier Port of South Asia in less than a decade and thereby made it a valuable national asset to be treasured by all Sri Lankans.

்க்கிய நாலைப் பிரிவு பாத்தர் நூல்த சேலை வரழ்ப்பாணம், Humble dedicated to the memory of Labith Athulathmudali who as Minister of Triade and Simpping and foresight to elevate Colombo to the premier Port of South Asia in less than a decade and thereby made it a valuable national asset to be treasured by all Sri Lankans.

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Preface

Sri Lanka strategically located on the major sea lanes of the Indian Ocean, had from time immemorial served as the centre of shipping in the Indian Ocean. The Port of Colombo under the first ever port development programme spanning thirty seven years (1875 - 1912), successfully maintained a high level of port efficiency to occupy by 1912 the leading position in the hierarchy of Sri Lankan ports. The transformation of the open dangerous roadstead of Colombo to one of the leading artificial harbours of the world with an anchorage covering about a square mile is comprehensively dealt with in Volume I. Such advantages coupled with its high reputation among international shipping circles for expeditious dispatch of vessels soon made it to be known as the Clapham Junction of the East for shipping. By 1910 in terms of the tonnage of shipping handled, Colombo ranked as the third great port in the British Empire and seventh in the whole world.

The lure of Colombo as a leading port was proved by the quality and efficiency of services it offered as a port of call than the volume of overseas trade generated by the plantation economy. A port that enjoyed such international fame for its efficiency maintained by the use of labour intensive methods in port operations saw signs of erosion of such reputation during the inter war years, due to both endogenous and exogenous reasons. In effect, it meant that Colombo as a port of call losing its competitive edge among the ports in the region.

The present volume analyses the course chartered by the Port of Colombo with the commencement of the World War II. It examines the unique role the Port played in the eastern theatre of war until 1946 and the post war recovery of trade and shipping which was a short lived one. From the mid 1950s a port with an international reputation entered a phase of unprecedented decline in all sectors of its operations, a decline which lasted till the late 1970s. The volume of trade and shipping that the Port handled during these years was so low that there was a virtual lull in port improvement activities

The focus of attention in the first part of the present volume, therefore, presents a critical evaluation of the strategies pursued by successive governments in the post - independence period and their impact on the cargo and shipping movements in the Port of Colombo. It also examines in depth the effectiveness of measures taken to improve port efficiency.

Having gone through a period of lackluster development in all spheres of its activity which resulted in infrastructure development receiving lowest priority the Port of Colombo enters one of the most exciting periods in the annals of its development as a modern port. Amply supported by facts and figures the second part of the volume narrates a success story in almost all sectors of its activities. It may perhaps be no exaggeration that the Port of Colombo in the last quarter of the present century overshadowed all its achievements in the pre world war II era. Significantly, the analysis shows that the Port of Colombo has ranked 26th in the world league of container ports in 1995, from the earlier 139th rank it held in 1979. In emerging as the hub port in South Asia it epitomises a developing country's grit and determination in the march to containerisation. The final part of the volume examines the problems and prospects of the Port of Colombo in the fast changing maritime scenario of container technology.

Sri Lankan researchers are faced with the twin problem of securing adequate funding for their research publications while grappling with the problems of escalating printing costs on the one hand and a reduced reading clientele. In this respect the writer considers himself very fortunate that without much difficulty he was able to solicit funding assistance from the Japan Overseas Ports Cooperation Association (JOPCA) Tokyo through the kind intervention of Mr. Ikuhiko Yamashita, its Acting Secretary General. To JOPCA and Mr. Yamashita I owe a debt of gratitude. Mr. K. Shimizu of Japan Port Consultants Ltd. (JPC) Colombo whom I had to be in close contact with in Sri Lanka regarding various matters pertaining to the writing of the volume always helped me ungrudgingly. Therefore I acknowledge with gratitude the assistance given to me by Mr. Shimizu and his staff without whose help I would not have been able to bring out this volume.

Much of the writing connected with this study was done at the University of Peradeniya from 1995 to 1996 when I was attached to the academic staff of the Department of Economics of that University while on sabbatical leave. Professors Hewavitharana and Sinnathambi provided me with the facilities required for the purpose to whom I am much obliged. Also the Department's two clerical assistants Miss Kumudinie Kanathegedera and Mr. Senake Yatigammana who did most of the word processing. Mr. Colvin Senaratne of the Department of Geography of the Kelaniya University carried out the painstaking job of drawing all the maps that appear in this volume to whom I am very grateful. There are a number of officers in the Sri Lanka Ports Authority who helped me in various ways to bring out this volume among whom Mr. Prasanna Weerasinghe deserves my special thanks for going through some of the chapters in the manuscript stage and clearing some of the ambiguities I was confronted with. I consider myself very fortunate in securing the assistance of my esteemed colleague Professor M.P. Perera who painstakingly read through the entire volume making valuable suggestions which I have incorporated here. I thank sincerely for the services offered ungrudgingly in the preparation of both volumes.

I will be failing in my duty if I do not express my thanks to Mr. Susiri de Silva, Managing Director, Sarvodaya Vishva Lekha and his dedicated staff, for having undertaken to print this volume and carrying out an excellent job at short notice. Finally, I also owe a debt of gratitude to my wife Leela and the two children Shiromie and Damitha who gave me the moral support to write this volume.

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Abbreviations

AMP Accelerated Mahaveli Programme
APEC Asia Pacific Economic Cooperation

APL American President Lines

ASEAN Association for South East Asian Nations
AR Administration Report / Annual Report

BOI Board of Investment
BOO Build Own and Operate

BOOT Build, Own, Operate and Transfer

BOT Build Operate and Transfer

BSIN British India Steam Navigation Company
BQ Bandaranaike Quay in Colombo Port

BW Breakwater

CASA Ceylon Association of Ship' Agents
CFB Central Freight Bureau in Sri Lanka

CFS Central Freight Station

CGM Compagnie Generale Maritime

COBRA Continent Britain Asia Container Service

COL Ceylon Ocean Line

CPC Colombo Port Commission

CT Container Terminal
CTB Ceylon Transport Board
DWT Dead Weight Tonnage

DQ Delf Quay

EDI Electronic Data Interchange
EEC European Economic Community

EPZs Export Processing Zones

ESCAFE United Nations Economic and Social Commission

for Asia and the Far East

ESCAP United Nations Economic and Social Commission

for Asia and the Pacific

EU European Union FCL Full Container Loads

FEECS Foreign Exchange Entitlement Certificate Scheme

FTZ Free Trade Zone

GCEC Greater Colombo Economic Commission
GATT General Agreement on Trade and Shipping

GDP Gross Domestic Product

GNP Gross National Product
GRT Gross Registered Tonnage

HA Hectare

HPAES High Peforming Asian Economies

IBRD International Bank for Reconstruction and

Development

IBM International Business Machines Corporation

ICD Inland Container Depot

IMF International Monetary Fund IPZs Investment Promotion Zones

JCT Jaye Container Terminals, Colombo Port
JICA Japan International Cooperation Agency

JOPCA Japan Overseas Ports Cooperation Association

JPC Japan Port Consultants Ltd.

LASH Lighter Aboard Ship
LCL Less Container Loads

M Metre

MI Messageries Imperiales
MM Messageries Maritimes

MN Million

NAFTA North Amercan Free Trade Agreement
NEDECO Netherlands Engineering Consultants

NICs Newly Industrialised Countries

NOL Neptune Orient Line

NP North Pier, Colombo Port
NRT Net Registered Tonnage

OCDI Overseas Coastal Area Development Institute

OCL Overseas Container Line

OECF Overseas Economic Cooperation Fund of Japan

OGL Open General License
P(c)C Port Cargo Corporation

PCC Principal Collector of Customs

PIL Pacific International Service, Singapore

P&O Penincipal Collector of Customs
PSA Port of Singapore Authority

PTPSC Port Tally and Protective Services Corporation

PVQ Prince Vijaya Quay in Colombo Port

QCT Queen Elizabeth Container Terminal in Colombo

Port

QEQ Queen Elizabeth Quay in Colombo Port

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RDT Radio Data Transfer RO RO Roll On, Roll Off

Rs. Rupees

SAARC South Asia Association for Reginal Cooperation

SAFTA South Asian Free Trade Area

SAPTA South Asian Preferential Trade Agreement

SDR Special Drawing Rights
SLPA Sri Lanka Ports Authority

SP Sessional Paper

TEU Twenty Foot Equivalent Units

UAE United Arab Emirates

UK United Kingdom of Great Britain and Northern

Ireland

UN United Nations

UNCTAD United Nations Coference on Trade and

Development

UNDP United Nations Development Programme

USA United States of Amerca
US\$ United States Dollar
VHF Very High Frequency

WB World Bank

WTO World Trade Organisation

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Chapter I

Introduction

The rise of Colombo to primacy in Sri Lanka (known as Ceylon upto 1972) and its elevation, subsequently, to the port of South Asia occurred in two phases under different circumstances. The former position was achieved during British Colonial times (1796-1948) when the first major port-development programme spanning thirty seven years (1875-1912) was completed. That programme of port development transformed the roadstead of Colombo to one of the biggest artificial harbours in the world with a water area of nearly one square mile. As a British colony, throughout the period upto 1948, British involvement became a marked feature in the spheres of port planning, engineering services, supply of capital etc.

The latter position which, Colombo, now enjoys, is due, among other things to the progressive steps taken in the 1980s to containerise cargo handling and thus raising Colombo to an unrivalled transhipment point in South Asia. From poor beginnings the Port by the end of that decade had made rapid strides in container handling and in the year 1995 with one million TEUS being handled Colombo came second only to Singapore (Daily News, 15 December 1995).1 According to data available, Colombo, by 1993 had reached the 28th position among the world league of container ports from the 138th position it occupied in 1979 (Table 5.16 Chapter V) and latterly to the 26th position). These are commendable achievements made by a port in a developing country like Sri Lanka, during a short period of nearly ten years. In that, one cannot however, underestimate the role that Japan played at planning level, provision of technical and engineering expertise and, above all, the supply of loans on concessionary terms.

The factor that fundamentally motivated the modernisation processes launched during both periods, it must be stated, was the need to prepare Colombo to meet the oncoming challenges in maritime technology so as to reap the maximum advantage of Sri Lanka's geographical location in the Indian Ocean. Volume one, which covers the development of the port from 1860 to 1939, deals primarily with measures taken to meet the requirements of, first the coal burners, and later the diesel engined vessels calling at Colombo. The purpose of this study is to make an analysis of the Port's activities in the postindependence era with its major thrust on containerisation. Despite some improvements made on the existing facilities, Colombo, during the greater part of the post independence period remained basically a lighterage port, using, by and large, labour intensive methods in cargo handling operations. The transition, to some degree the mechanisation of such activity as well as of the use of alongside berths took place only in very recent times. The relevance, therefore, by way of a preamable to give a historical account of Colombo's development during British times which is of significance in twofold ways. First, to link Colombo's present developments with that of the past so as to trace the antecedents leading to its rise to eminence both in the region and in the hierarchy of ports in the world. Also, to show that there had not been a significant change from the past policy of concentrating port investments on the single Port of Colombo the seaward extension of which was constrained by breakwaters. Despite such impediments and other drawbacks the Port of Colombo continued to play its traditional role as the gateway for Sri Lanka's import-export trade. It is unavoidable therefore that some of the things that has already been mentioned in volume one may be referred to in this narrative.

Historical evidence suggests that, in the 15th century Arab traders made Colombo the centre of their trading activities in the Indian Ocean. A century later, the Portuguese fortified it

and enhanced its importance as the most popular emporium in the East. During the Dutch period (1658-1796) a further enhancement of Colombo's importance was seen. Nevertheless, it was under the British with the extension of their sovereignty over the whole island that Colombo received the greatest impetus for its rise to eminence in the Indian ocean region for which factors both endogenous and exogenous were responsible.

After the first quarter of the nineteenth century, the British introduced plantation agriculture, first coffee, and later in the century, tea, rubber and coconut cultivation, to the slow moving semi-feudal economy of Sri Lanka. Despite the creation of a dualistic economy the plantation industry, through the expansion of the import-export trade, nevertheless, linked Sri Lanka with the world economy (Gunasekara, 1962, 6-7).²

From the early nineteenth century, Colombo, had been more or less the only outlet for the island's main exports and as these exports grew so did the demands on Colombo. The reasons why, Colombo, emerged as the main outlet for these exports are to be found in its locational advantage. The major plantation crops for exports (coffee and later tea, rubber and coconut products) were grown in Colombo's hinterland forming the wet zone area. For all these exports, Colombo, therefore, served more economically and conveniently than Trincomalee in the eastern coast and Galle in the southern coast. Colombo, in the last century had also the advantage by another development of a rich agricultural hinterland. Not only were vast tracts of land brought under plantation crops but was also served, first, by a network of roads and later by the railway system. For both the transport systems in the island, Colombo, became the maritime terminus. In the nineteenth century, Colombo, thus conformed to the general definition of a port which is a knot where inland and ocean transport links meet and intertwine (Weigand, G.G., Geographical Review Volume 28, 188-200).3 A natural corollary of this development, was that Colombo, became the outlet from and an inlet to a hinterland that almost covered the whole island. For instance from 1825 to 1886 which approximately was the coffee era the amount of coffee that was shipped from Colombo in the quinquennials 1848-52, 1858/62, 1868/72, and 1878/82 averaged at 315,000, 601,000, 938,000 and 594,000 cwts per annum respectively (Ceylon Government Blue Book, Annuals, 4 PCC).⁴

The recovery that followed the collapse of coffee in the last quarter of the nineteenth century was followed by the export sector being broad based upon the expansion of tea, coconut and rubber cultivation and graphite mining. Colombo, became the natural outlet for most of these exports and, consequently, Colombo's share of Sri Lanka's exports in value rose from 80 percent in the 1860's to 85 percent in the 1870's and further to 95 percent in the 1890's (Ibid).⁵

The exposure of Sri Lanka to the world economy via the growth of export agriculture as well as the proliferation of new enterprises among the indigenous population, made the country progress towards a money economy. But, because of the persistence of dualism the commercialisation of the peasant sector, took place at a very slow pace. Conservatism, coupled with the simple way of life moulded by the teachings of Buddha made the bulk of the peasant population less inclined to economic advancement through the acquisition of landed property or money. Satisfied with the cultivation of their scattered farms, they were not inclined for paid labour despite the increasing demand for such labour in plantations closer to their settlements. The expanding plantation sector, consequently, had to rely on South Indian immigrants, and from the forties there were waves of such immigrants. They who formed a large labour force in the country created an increasing demand for consumer goods. Added to it was the demands of Colombo itself which gathered a large population as it became

the centre of administration and commerce. Obviously, the demand from all quarters was for cheaper consumer items of which the greatest was for rice. The Sri Lankan peasantry, as stated earlier was commercially less inclined and hardly responded to the rising demand for their produce. Therefore, along with other consumer goods, rice also had to be imported and from the beginning of the coffee era the latter bulked the island's import trade for which Colombo obviously was the inlet. The data given in Table 1.1 exemplify the way how rice imports increased during the second half of the nineteenth century.

Table 1.1

Rice Imports Sri Lanka 1858-1902
(Quinquennial Averages)

YEAR	AMOUNT (in 1000 Cwts)		
1858-62	1,698		
1863-67	2,120		
1868-72	2,513		
1873-77	3,116		
1888-92	3,270		
1893-97	3,021		
1897-02	4,364		

(Source: Ceylon Blue Book, Annuals).

True that Colombo, virtually became the funnel through which almost whole of Sri Lanka's foreign trade passed through in the nineteenth century. But, it has to be emphasised that if the overseas trade had been the only relevant factor for the growth of Colombo as a major port it would definitely have reflected the development of Sri Lanka's overseas trade. That in effect would have reflected the development of plantation agriculture and economic activities supplementary to it. A

closer analysis of the data given in Table 1.2, however, indicates that there was a wide discrepancy between Colombo's commodity trade and the tonnage of shipping calling at the Port. The trade it handled had no relationship to its tonnage of shipping. As for example, the volume of shipping more than quadrupled during the commercial stagnation of the 1880s. An answer to that divergence lies much of Colombo's development and also what attracted shipping to Sri Lanka in the nineteenth century. Moreover, despite the fact that Colombo handled the bulk of Sri Lanka's merchandise trade it did not dominate shipping until the 1880s and in most years of the 1860s and 1870s, Galle, attracted more shipping than Colombo, a fact which is illustrated in the data provided in Table 1.3. The secret of Sri Lanka, handling more shipping, (both Colombo and Galle) than the demands of its own trade was the attraction as a port of call in this part of the Indian ocean, for services such as the supply of water, shipping stores, fuel bunkering, transhipping, ship repairs etc. This was fundamentally due to Sri Lanka's geographically strategic situation during the days of the sailing vessels as well as with the introduction of steamers to the Indian Ocean. But, Galle, located near the southern tip of the island reigned supreme over Colombo, in the attraction of shipping because of its position in the monsoonal wind regime and later in the major steamer routes of the Indian Ocean. However, the colonial government's port development policy initiative in the seventies led gradually to undermine Galle's supremacy over Colombo in shipping.

The Decline of Galle as a Port

In the 1850s when the steamers were first introduced to the shores of Sri Lanka, they were not larger than the sailing vessels of the time. But in the sixties not only were sailing vessels being rapidly displaced by steamers in Sri Lanka's trades but the size and draft of the latter too began to increase. For them, Galle, because of the submerged rocks in and at the entrance to the harbour appeared to be a trap rather than a place

Table 1.2

The tonnage of shipping using the Port of Colombo and the value of Sri Lanka's trade handled by the Port of Colombo, 1858-1902 (Quinquennial Averages)

Period	Tonnage of shipping using Colombo (in 1000 tons)	Value of trade (in Rs. 1000)	
1858-62	330	61,963	
1863-67	409	85,605	
1868-72	532	83,270	
1873-77	937	106,339	
1878-82	1,448	71,636	
1883-87	3,063	74,230	
1888-92	4,243	107,511	
1893-97	5,611	158,792	
1898-02	7,534	207,109	

(Sources: Ceylon Blue Book (Annuals); A.R.PCC)

of safe anchorage. Casualties to shipping, consequently, were many and to prevent, Galle's, reputation as a major port of call in the Indian ocean, being impaired that too had to be developed. But that was not the only port demanding improvements. Colombo, what was then, an open dangerous roadstead exposed to the fury of monsoons also needed improvements to meet the requirements of steamers. As stated at the outset, Colombo was the funnel through which almost whole of the island's overseas trade was channelled. The vessels, as the roadstead at that time was, piloted into this refuge with extreme caution. The handling of cargo was a laborious task involving serious risk and delay. Barrels of coffee and bales of cinnamon had to be hoisted and lowered by hand with the aid of slings and pulleys. This uncertainty and danger coupled with the rapid advance of steamer traffic in the eastern waters made it absolutely necessary that the open (e)

Table 1.3

% of (a) (d) as a 35.4 34.2 33.6 33.6 35.8 37.1 46.2 46.8 Fonnage of Sri Lanka's Total Tonnage of Shipping shared by the Ports of Colombo Colombo shipping 419,349 405,279 325,798 943,818 ,439,295 510,995 739,952 ,205,940 2,130,127 2,776,40] 9 and Galle, 1855-1883, (selected years) % of (a) (b) as a छ 43.7 47.4 551.7 50.0 51.3 45.3 47.3 44.2 Tonnage of 433,548 shipping 388,928 560,606 729,319 ,116,888 ,024,605 ,004,772 ,358,605 850,063 444,443 645,377 9 Galle Total tonnage of shipping Sri Lanka 916,149 634,482 888,992 ,246,614 ,424,945 1,182,325 ,994,394 2,216,403 3,070,128 3,212,434 2,609,731 a YEAR

(Source: Ceylon Blue Book, Annuals)

1870 1873 1875 1879

1868

roadstead of Colombo had to be converted into a safe all-weather harbour. And, with the opening of the Suez-Canal in 1869 Colombo Harbour was destined to play a vital role in the shipping world (Ceylon Hansard, 1958, 4741-4752).6

But, to have developed two ports on the same coast appeared to be a colossal waste of funds of the plantation economy, the revenue of which depended on the single export crop, coffee. Hence, the rationale of developing one of the ports which, naturally, aroused clash of two interests. The leading international shipping companies using Galle as a port of call led by the Peninsula and Oriental Company (P&O) of Britain and the Messageries Imperiales Company of France agitated for the development of Galle (CO 54/452, 1870).7 The planting and commercial communities on the other hand whose interests were served mainly by Colombo, were in favour of effecting improvements to Colombo. In the ensuing debate on the choice of a port for development the claims of Colombo proved stronger than those of Galle. In view of the current interest in the development of the latter in South Sri Lanka, it is pertinent to discuss the arguments put forward to strengthen the case of Galle in the last century. The campaign to develop Galle was spearheaded by the P & O Company for many reasons. By that time the P & O was the foremost shipping line engaged in the Indian Ocean trade and was also engaged in the important task of the contract to carry imperial mails to the East and the Far East. The natural harbour of Galle that was on the direct sea routes of the Indian Ocean was invariably used by steamers of that shipping line not only as a coaling depot but also as a transhipment point for mails, cargoes and passengers. So vital a role did Galle play for the P & O that in the sixties in terms of ship calls and steamer tonnage at that port the vessels of the company as per figures in Table 1.4 dominated its shipping scene. The P & O, did face many hardships at Galle on account of the unprotected harbour with sunken rocks at the entrance channel and within the anchorage area.

Table 1.4
Steamer Visits - Galle 1865 - 1867

Year	ual role	P & O		Messageries Imperiales		British India Steam Navigation Co.	
	No.	Tonnage	No.	Tonnage	No.	Tonnage	
1865 1866	226	245,132	72	94,566	52	42,552	
1867	236 236	259,286 273,224	76 72	97,042 92,852	58 76	41,984 59,848	

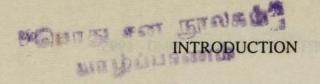
(Source: (CO 57/50, Report on Galle Harbour)

A deputation to the Secretary of State for Colonies by the P & O brought to light that within six years three ships of the P & O alone suffered greatly and that the vessel "Malabar" was totally wrecked (CO 54/452, 1866).8 Apart from the damage to vessels there was also the loss of coal reckoned at 6% of the total import of coal and the exposure of the mooring ground to the ravages of the south west monsoon. Here again it was the P & O which issued annually on an average of 35,000 tons of coal to its steamers that suffered most. On the basis of the annual wastage of 6% on coal imports it was estimated that the P & O lost about 2100 tons of coal per annum (S.P. IX, 1869).9 In order to convince the imperial authorities that the agitation for the development of Galle Harbour by the company was not motivated solely by self interest but also in the furtherance of wider imperial interests arguments such as the safety of passengers (many of whom were servants of the Crown), the mails, and the valuable merchandise in transit were also put forward. Besides, by way of strengthening the argument further the P&O Company pointed out that the Indian Government, which had a large and direct interest in the maintenance of the growing trade between Bombay and China and between ports of India itself, used Galle Harbour for the purpose. There was also the growing Australian trade carried via Galle with India as well as China.(S.P. IX, 1869).10.

However, the acceptability or otherwise of these arguments had to be considered with reference to two fundamental issues. One was that any port development project, initially, had to be completed for a loan of £ 250,000 approved by the colonial office in London. The other was the benefits that the colony would reap by developing a particular port. Regarding the first issue it was found that although Galle was a commodious natural harbour it still had to be protected against natural obstacles by providing two breakwaters of, one 3930 feet and the other 600 feet long. Moreover, because of the strong ocean swell that prevailed nearly for six months of the year, the breakwaters had to be constructed with granite of the toughest kind which had to be quarried and transported by sea from a considerable distance away and at great cost. On the other hand if the sunken rocks in the harbour as referred to earlier were not removed the construction of breakwaters would serve no purpose. Since the potential of dynamite as an explosive agent was yet to be discovered the removal of the rocks alone was estimated to cost around £ 40,000. Moreover, in the absence of skilled labour locally of the type required for sea works, it had to be either Chinese or Indian. Thus in view of these constraints the problem of developing Galle harbour appeared to be a costly affair and doubts were cast by eminent engineers whether it could be completed for £ 250,000 (CO 54/452,1870)11. To construct the two breakwaters alone, Harrison, a member of the Legislative Council and who was an engineer by profession estimated the cost at £ 386,035. Two others, the Admiralty Engineer, Clerk and Gregory, the President of the Institute of Civil Engineers put the cost at £ 424,589 (CO 54/469, 1871).12 Townshend, the eminent civil engineer who was in charge of the construction of Plymouth breakwaters calculated the cost to be £ 325,608. None of these estimates, on the other hand, took into account the cost of providing other facilities such as coaling depots, jetties, deep water piers and road and rail links. The most forceful argument against the development of Galle Harbour was that the

proposed breakwaters were capable of enclosing a water area of 400 acres only which was considered totally inadequate in considering the increasing resort of steamers to Galle (CO 54/354, 1860).¹³ Between 1855 and 1869 the steamer tonnage at that harbour recorded an increase of 191 per cent. (Ceylon Government Blue Book Annuals)¹⁴ Given the pace at which the shipping fleets plying in the Indian ocean transforming themselves into steamer fleets,this was expected to rise further in the years to come.

In any case since the general revenue was to guarantee the loan, careful consideration also had to be given to benefits accruing to the colony from the development of that harbour. An analysis of financial capabilities of the harbour showed that the revenue was far short of the expenditure on its maintenance, establishment and the servicing of the debt of £ 250,000. In the year 1869 the estimated expenditure on these alone amounted to about £18,175, but the revenue derived from port and harbour dues, pilotage merchandise dues, was slightly less and was short of nearly £156 to meet the estimated total annual cost. It was also argued that Galle was barren of a hinterland to generate wharfage dues of any significance from its imports and shipments of merchandise trade to claim the development of that harbour. Even during the height of the coffee era in the sixties shipment of coffee from Galle did not amount to one fiftieth of the total crop of the colony. Such small amount of the commodity exported from Galle was then known as peasant or native coffee produced in the Southern Province. Nor was there a probability of increasing shipments from Galle in view of the fact that the transport development programme then in progress was tending to be concentrated on Colombo. Besides, the processing industries - drying of coffee, coconut oil milling etc. - were all located in and around Colombo. Inevitably, mercantile and banking institutions, therefore, were also being concentrated in Colombo. The argument that Galle's greater advantage over Colombo lay on being located on the



major sea lanes of the Indian Ocean was also convincingly refuted by Governor, Sir Herculese Robinson. It was pointed out that Colombo, being only 30 miles out of the direct sea route between Aden and Galle, and 18 miles from the direct sea route between Bombay and Galle, might serve as the great coaling station of the East' and that Colombo was a more accessible port than Galle, being free from the treacherous currents which exist off Galle. Moreover, the tonnage of shipping at Colombo had increased more than 13 fold between 1830 and 1869 (Institution of Civil Engineers, 1886).15 Unquestionably, Colombo's claim for port investments, therefore, superseded over those of Galle which hitherto enjoyed almost a monopoly position of serving international shipping as a port of call for services. Quite apart from these advantages, Colombo, as an open roadstead promised a larger sheltered area than the natural harbour of Galle, on a given amount of investments. At the same time it was presumed that once Colombo was improved with steamers in mind, it would become convenient as a port of call for steamers that earlier used Galle. Above all, a factor that weighted heavily in favour of Colombo was its potential to increase revenue, not only to meet the capital costs of harbour works, but also its working expenses. According to the Master Attendant there was also the greater possibility of increasing the annual revenue of the Port of Colombo through a revision of port tariff to justify an enlarged loan of £650,000. Supported by statistical evidence the Master Attendant proved that if the unimproved Port of Colombo fetched an annual income of £2,213, after effecting improvements there was the certainty of increasing it to £ 32,000. The arguments put forward by him for the revision of port tariff being convincing, the Colonial Office, on the request of Governor Hercules Robinson, raised the loan limit up to that amount. Armed with these very convincing arguments, the Governor, was able to persuade the Colonial Office to choose Colombo, rather than Galle for improvement and that the scheme of Townshend, to cost about £ 650,000 was accepted as

feasible (S.P. XIII, 1898).¹⁶ Consequently, in 1872 it was decided to embark on Townshend's project which provided for a large sheltered area by constructing a breakwater from the Customs House Point (CO 54/473, 1871).¹⁷ Preliminary loans totaling £450,000 were raised - £250,000 from the Public Works Loan Commissioners (PWLC), London, at 3 1/2% interest and £200,000 in the London open market at 4 1/2% interest and the foundation stone was laid in 1875. (CO 57/64, 1874).¹⁸

However, after the decision to develop Colombo had been taken, the Port experienced a major change in the composition of its shipping. As indicated, with the opening of the Suez-Canal, in the shipment of coffee, the transition from sailing vessels to steamers was taking place and in consequence by the late 1870s more than 80% of the shipping in Colombo were in steamers. For example, by 1878 1,202,270 tons of shipping using Colombo, steamers added up to 915,101 tons while in 1869 they constituted only 62,575 of the Port's total tonnage of 466,227 (Ceylon Government Blue Books).¹⁹

Thus, Colombo's changing shipping scenario inevitably, brought about fresh thinking on development to meet the future demands of steamers, and accordingly, two plans 'A' and 'B' were drawn up for consideration and what received serious consideration was the latter. That plan envisaged, in the first place, the prolongation of the South-West Breakwater then in construction upto a distance of 4210 feet. Another breakwater was to be constructed from a point on the coast near Mutual in a westerly direction for a distance of 3600 feet. These two arms were to form a closed harbour of 502 acres with an entrance at the North-West corner 600 feet in length (CO 54/522, 1879).20 The plan also included: (a) the construction of two jetties; (b) reclaiming a large tract of land in front of the Pettah in order to form coal wharves and jetties thereon; and deepening the harbour by dredging. The total cost of executing the plan inclusive of the expenditure already incurred was

estimated at £1,008,458. But no finality could be reached in implementing the plan because of financial and other implications involved. To service a debt of over one million pounds sterling, and to meet the cost of port operations it was estimated that annually a sum of Rs. 809,028 was required which was far too higher than the revenue accruing to the port at the then prevailing tariff. Therefore, with a moderate tariff increase to bring the annual revenue to Rs. 400,000 from the revenue of Rs. 60,000 collected per year on the basis of the old rates, the Legislative Council raised the loan limit to £800,000, but also cautioned that only those items of work that could be completed within this loan should be undertaken (CO 54/522, 1879).²¹

In effect, it therefore, meant a partial execution of plan 'B'. The extension of the South-West breakwater as envisaged in the plan was to remain and the construction of the other breakwater was to be postponed until the trade demanded and financial position improved. The other measures taken to curtail expenditure were to drop certain items from the scheme that either had no relevance to the needs of the Port at that time or would have created serious problems. One item that had no relevance was the construction of the jetties. Although Colombo was patronised by steamers of larger size, they seldom or never came fully laden for Colombo or left with full loads of cargo. For them, Colombo, was not a homeport but touched there on their way to or from other ports. Except for a few colliers, they brought or took away small consignments of cargo or few passengers. Consequently, instead of the time consuming exercise of going alongside wharves, the vessels preferred to be at moorings in the stream so that operations could be carried out from both sides with the help of lighters. Similarly, the reclamation of land for coaling facilities was also considered unnecessary since that activity was still being performed by Galle. Hence, Colombo's share of the coal trade was comparatively small and even that was mostly for the Government Railway (CO 54,519, 1879).22

Quite apart from the port being relieved of a financial burden by the non-implementation of the whole project, the country also stood to gain by not inheriting an imperfect harbour. The execution of the project in full would have created what was known as a 'Close Harbour' with perfectly still water that would have served the trade for the time being. But it left no room for seaward extensions as trade expanded. From an environmental point of view it meant the creation of a harbour subjected to pollution in the immediate proximity of the Pettah area which was densely populated, overcrowded, with defective drainage and with all conditions of epidemic diseases. In the final analysis, what was of utmost importance was to maintain Colombo's reputation as the healthiest city in the East. That in turn meant the coming into possession of a healthy port in a healthy city (CO 54/519, 1879).²³

The total expenditure for the execution of the revised version of the project was estimated at £ 712,593 inclusively of the sums already spent on the breakwater. Hence, in addition to the £450,000 raised earlier, another loan of £260,000 at 4 per cent interest was raised in the London open market in 1884. Even in the partial execution of the port development programme a policy of strict economy had to be adhered to.

Nevertheless, in view of factors such as the nature of the seas around south west Sri Lanka, the paucity of stores except granite and the absence of skilled labour of the type needed for marine works, the pursuance of a policy of strict economy to keep the expenditure well within the fund allocation appeared to be a difficult task. That became all the more difficult, since in the search for economy the all important requirement from an engineering point of view of withstanding the mighty force of the ocean swell, particularly during the south west monsoon that prevailed for nearly half the year could not be sacrificed. The way how these mutually antagonistic objectives were realised will, therefore, be the focus of attention in the

discussion regarding the progress of work connected with the construction of the South West Breakwater. As far as cheapness of construction was concerned the Rubble Mound Type of breakwater seemed to be the best. As the name implies it meant the deposition of rough blocks of rubble stones of various sizes at pell mell in a continuous line along the sea floor until it reaches the crest. One advantage in the construction of this type of breakwater, it was believed, was that it could be accomplished with unskilled labour. But the nature of the seas around that part of Sri Lanka is such that the disadvantages of constructing such a type of breakwater far outweighed the advantage of cheapness of construction. There was also the need for constant replenishment of material because of the fact that such type of structure could not withstand the force of waves.

The minutes of proceedings of the Institution of Civil Engineers, London on the subject of constructing an artificial harbour at Colombo provide some interesting information regarding the nature of wave action in that part of Sri Lanka. John Kyle, the Resident Engineer had observed that he knew something of artificial works that had been constructed elsewhere, but he did not know any work which had been tested to the extent of that at Colombo. Photographic evidence, according to him showed that, what took place at, and just after the burst of every monsoon about the months of May and, June was an instantaneous one. The height of the top of the water was commonly 120 feet above sea-level, and occasionally much more. Elaborating further, Kyle pointed out that no one would dispute the law of forces and motion, that action and reaction were equal and opposite. He assumed, therefore, that the elevation attained by the sea was a measure of the stroke which the structure had to sustain. The length was about 3,000 feet, and the stroke by the sea at one and the same moment often caused the water to rise to the height of 120, and sometimes 150 feet. That, he mentioned, was something that very few works had to undergo. The persistence of strokes of such magnitude, it was pointed out, was not limited to days but a question of weeks. The reason for the wave action to be violent and the rise to such enormous height had been ascribed to the fact that during the occurrence of the heavy monsoon swell, it was not a broken sea, but the swell itself which came in with a great roll. Elaborating further Kyle went on to say that in contrast to shocks from broken-waves which were highly aerated (exposed to air carbonic matter) as in England's coast those in Sri Lankan coast during the monsoon came with a tremendous stroke due to the body of comparatively unaerated or partially aerated water (Institution of Civil Engineers 1886).²⁴

The South-West Breakwater

Under these circumstances, it was inevitable though expensive to select the Wall Type of breakwater for the south west. This involved the depositing of concrete in mass within moulds in the same general outline and which could bear the force of the ocean swell effectively. The material needed for the structure had to be imported since no cement and iron were available. Although teak was the best timber to be used but the cost of teak was 2 shillings a cubic foot more in Sri Lanka than it was in London market. There was particularly nothing of which to take advantage to any extent in carrying out the works. What was more, skilled labour too was scarce locally and hence had to be imported at great expense. Consequently, cost reductions had to be achieved through other ways and thus the pragmatic decision: (a) to undertake the construction work by the colonial government without the intervention of a contractor; (b) to use convict labour extensively at a payment of thirty seven and half cents (37 1/2 cents) per day compared with 85 cents for free labour; and (c) to adopt mechanical appliances to the greatest extent possible. The objectives under (c) were to tide over the problem of skilled labour to some

extent and also to utilise the short period at disposal arising from the ocean swell prevalent during the monsoon period to the maximum advantage. The designing of the scheme 'B' of the Colombo Harbour Development Programme which included the South West Breakwater was entrusted to Sir John Coode, the Vice-President of the Institution of Civil Engineers, London.

Having decided on the type of breakwater, and the measures to be adopted to achieve maximum economy in construction, the other problem to be resolved was the way in which the South West Breakwater was to be built to resist the wave action as described above. The way how such requirement was met could best be described in the light of an account on the construction of the South-West Breakwater by Kyle and Coode, the two personalities directly involved in Colombo harbour works. According to their account the breakwater was built of concrete blocks as referred to earlier. The block work was 34 feet in width and was founded at a depth of 20 feet below low water, on a rubble base consisting of gneiss rock deposited from barges. The blocks in the breakwater were set with sloping bond in slices of 5 feet 6 inches in width, the weight of each block varying from 33 to 17 tons, according to its position in the work. Many of the blocks, however, weighed 32 tons. The use of very large blocks were due to two reasons. For five to six months in the year nothing could be done at the breakwater as it was difficult to get upon it and the workmen could only get near the Root. Again, as stated elsewhere due to the difficulty of getting skilled workmen locally the alternative was the use of mechanical appliances and hence the economies of scale in using larger blocks. Although the structure was composed of separate such blocks that did not impaire the monolithic character of the breakwater. That was obtained, in the first place, by giving a large amount of bond to the work. The blocks generally broke-joint to the extent of 5 or 8 feet. Then there were five large joggle-grooves running from the top to the bottom. Those grooves were 18 inches in the transverse direction, and while they admitted of breakwater subsiding in the case of a treacherous piece of ground, they preserved it from being broken (Institution of Civil Engineers, 1886).²⁵

The scarce data regarding the employment of convict labour in the harbour works during the construction period of the south west breakwater show that it totaled up to 93,841 man days in 1874; 132,906 in 1875; 125,820 in 1876; 88,703 in 1877; 111,475 in 1878; 101,117 in 1879; and 71,896 for the first eight months of 1880. The records for the period after 1880 are more accurate which show that up to the year 1884 an average of about 500 to 600 were daily employed in Harbour Works (Inspector General of Prisons, Annual Reports).26 further measure used in the achievement of maximum economy was the rational distribution of convicts in different types of Harbour Works. Some, for example, were engaged in stone breaking and some were engaged in loading and unloading stones while a significant number was employed in the manufacture and setting of stones. Yet it was the most economical use of the latter in the limited time at command that seemed to have made the project a financial success. The monsoon period which brought rough weather to the south west region of Sri Lanka was used to the fullest extent for the manufacture of concrete blocks at Galle Buck at the root of the breakwater weighing between 14 and 32 tons while the fine weather was used fully to place the concrete blocks in position in the sea. There is evidence that the convicts worked eight hours a day during the rough weather and 12 hours a day during the fine weather that was used as the block setting season (Institution of Civil Engineers, 1886).27

The blocks were set in position by a Titan (a harbour craft fitted with a crane) and the pier was founded as follows. Near the land, the wall was found 13 feet below low water; this was raised to 16 feet at 977 feet, to 20 feet at 2,070 feet and

continued at this depth close up to the pierhead, where the foundation was stepped down to 23 3/4 feet below low water. The block work rose to eight feet above low water; and the capping raised the centre of the wall twelve feet above low water. The first 1326 feet of the pier was built with a sea and a harbour wall, having an interval between them of 14 feet, filled in with rubble. The sea-wall consisted of the foundation blocks, 13 feet long and weighing 28 tons each. Supporting these courses, 24 feet long composed of blocks of 14 to 26 1/2 tons each. The harbour wall was 12 feet wide, making a total width of 50 feet. At 1326 feet from the commencement, a single wall, 34 feet in width was adopted with four to five courses of 16 1/2 to 31 tons. The total number of blocks placed in the pier were 9, 656 and contained 124,984 cubic yards. The main works connected with the South West Breakwater which included the pier wall, pier head, light house fittings and capping from the pier head to the shore were completed by 1885 (Institution of Civil Engineers, 1886).28

The completion of the breakwater alone, apparently, was of no avail to shipping unless the harbour was dredged and in that it had to keep to the limit of 26 feet set by the Suez-Canal authorities. To bring the maximum area within that limit an extent of 85 1/2 acres of harbour area had to be dredged and it was almost accomplished by 1884. By that year the sheltered area of 502 acres was distributed as 329 acres with a depth of 18 feet and upwards; 242 1/2 acres of 26 feet and above; and 90 1/3 acres of 30 feet and more. In addition, four tiers of six buoys each were fixed parallel to the breakwater. With that Colombo Harbour of 1884 could provide berths to 25 steamers of the largest class in depths of from 26 feet to 40 feet of water; whilst there was space at low water for a great number of vessels drawing from 6 to 26 feet. Considering the nature of the sea around Colombo, it is no exaggeration to say that the South-West breakwater ranked as a work of great engineering skill. From the point of view of cost of construction, it was

more than a success. The total cost of work, for instance, was not only well within the loan limit set by the Legislative Council, but was also completed for a lower figure of £705,207 (Institution of Civil Engineers, 1886).²⁹

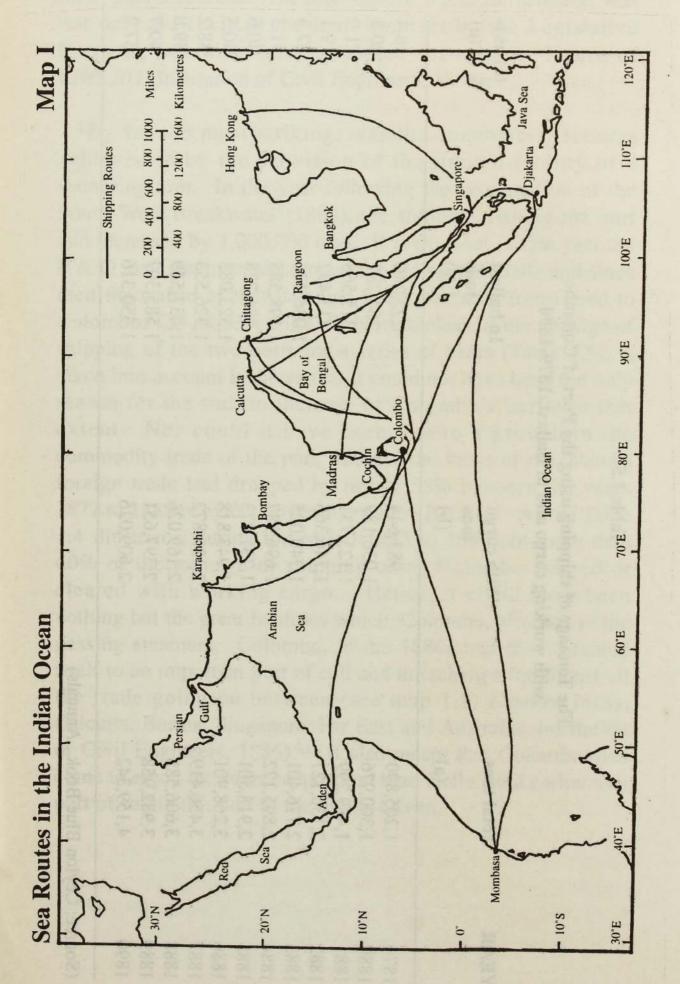
By far the most striking, was the commercial success achieved in by the provision of the limited facility of a sheltering arm. In the year following the construction of the South-West Breakwater (1882), the shipping visiting the port had increased by 1,000,000 tons. It is true that in that year the P & O mail steamers abandoned the old port of Galle and since then the traffic of that port had been gradually transferred to Colombo (CO 54/539, 1882).30 Nevertheless, if the tonnage of shipping of the two ports for a series of years (Table 1.5), is taken into account it shows that it could not have been the only reason for the sudden increase of Colombo's traffic to that extent. Nor could it have been due to a growth in the commodity trade of the port, because the value of the island's foreign trade had dropped by nearly 55% between the years 1877 to 1888 (Ceylon Government Blue Book).31 As the Table 1.4 illustrates, during the period 1883 to 1890 not more than 60% of the tonnage of shipping using Colombo entered or cleared with working cargo. Hence, it could have been nothing but the great facilities which, Colombo, afforded to the passing steamers. Colombo, in the 1880s had thus elevated itself to an important port of call and interchange for almost all the trade going on between (see map 1.1) Eastern India, Calcutta, Burma, Singapore, Far East and Australia (Institution of Civil Engineers, 1886).32 It also meant that Colombo, had come to enjoy the supreme position that, Galle, held earlier as a port of call in this part of the Indian Ocean.

Table 1.5

The Tonnage of shipping using the Port of Colombo with working cargo and in Ballast, 1879-1890

(c) as a % of (a)	18.4 20.3 21.9 19.1 37.3 40.6 40.5 39.8 40.7	7:10
In ballast tons (c)	222,246 264,787 315,568 413,492 1,036,376 1,198,585 1,186,728 1,323,083 1,326,553 1,437,559 1,585,307	015,055,1
With cargo tons (b)	983,644 1,036,189 1,123,731 1,746,365 1,740,025 1,696,587 1,731,773 1,943,818 2,138,872 2,138,872 2,169,026 2,397,651	7,609,026
Total tons (a)	1,205,890 1,300,976 1,439,299 2,130,127 2,776,401 2,895,172 2,918,501 3,268,901 3,456,419 3,606,585 3,982,958	4,159,342
YEAR noolahan	0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1890

(Source: Ceylon Blue Book, Annuals)



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Port Development 1890-1913

The transference of shipping from Galle to Colombo as well as the completion of Colombo's first programme of port improvement coincided both with the world-wide depression of the late 1870s and the early 1880s followed by the collapse of the coffee industry in Sri Lanka. For the time being, Colombo was thus spared of strains on the existing port facilities. The tapering down of that depression caused by the collapse of the coffee industry together with the country's export sector being broad based with the entry of tea, rubber, coconut products and plumbago by the closing years of the last century, the provision of additional port facilities appeared inevitable. quinquennial average value of Sri Lanka's overseas trade in 1883-87 which was Rs. 74,230,000 rose to Rs. 158,792,000 in 1893-97 and rose further to Rs. 231,682,000 in the period 1903-1907. But, from the point of view of the subject under consideration, the most significant development seemed to be the remarkable growth in the tonnage of shipping calling at Colombo. The annual average tonnage of the Port's shipping that was 3,064,000 in 1883-87 nearly doubled to 5,611,000 in 1893-97 and almost doubled again to 11,028,000 in 1903-07. The increase in the latter period represented nearly 93% of all shipping visiting the shores of Sri Lanka (Ceylon Government Blue Book).33

Once again the nature of facilities to be provided was determined by the purposes for which the shipping used the Port and their basic requirements. If the shipping data for the period were disaggregated according to the purposes for which they used the Port, they fell into three broad categories. Evidently a third of the shipping called at Colombo was not to load or discharge cargo. The essential requirement of such vessels was expeditious dispatch and to this end they preferred their moorings in the harbour rather than going along jetties which made coaling possible from one side only. At the end of

the nineteenth century, the size of such vessels varied between 3000 to 4000 tons (Ceylon Government Blue Book).³⁴

The second group was the steamers of major shipping lines enroute from Europe to India, Straits Settlements, Far East, Australia etc. and vice-versa whose main purpose of using Colombo was not the delivery or shipment of cargo. They called at Colombo mainly to coal and for services, but were prepared to take on or unload some quantity of cargo at Colombo merely to cover their port and voyage expenses. But, there is evidence that on the whole these vessels carried about two thirds of the country's seaborne trade during the 1890s and three quarters of it at the eve of the World War I. Like the former their's too was a quick dispatch. Consequently, they did not prefer the cumbersome practice of going through wharves but opted to be moored so that coaling and other shipping operations could be carried out from both sides simultaneously. Thirdly, there were a large number of smaller vessels engaged in the carriage of bulky cargoes such as rice, curry stuff, cotton goods etc. and passing traffic consisting mainly of plantation coolies. For such vessels the ideal method of discharging cargo would have been at wharves, but given the cheapness of labour at Colombo it did not seem worthwhile to construct wharves for them only, at least, in the late nineteenth century. Therefore, despite the fact that these vessels did not demand speedy dispatch, their cargoes too were to be loaded and unloaded by lighters from both sides (CO 54/701, 1906).35 That being the case, Colombo, at any time was likely to contain a significantly large number of ships most of which demanding expeditious dispatch, a large number of lighters and a large labour force. What was of crucial importance, therefore, was the availability of more space in the harbour and, fortunately, the partial implementation of the development plan as stated earlier, had made the provision of more space easier.

It was also a fortunate coincidence that the need for more space arose during a time when the port revenues were

becoming sufficiently buoyant to fulfil that requirement. The total port revenue which averaged at Rs. 546,798 per year in the period 1883-7 rose to Rs. 1,065,271 in 1893-97 and leaped forward to Rs. 1,718,816 in 1898-02 (A.R. PCC).36 What was of significance in such increases in port revenues was that, more than 60% was derived from dues paid by shipping and justified meeting their demands. The Harbour Board set up in 1885 to advise the government on the running and improvement of the harbour, consequently, proposed a port development plan to bring about enlarged space for shipping. In essence the plan meant the abandonment of the construction of the North Arm which had been postponed for lack of funds and in its place to construct two breakwaters. One, a North East Breakwater was to be based on the natural rock at Mutwal point and extend 1100 feet westward. The other was, the North West Breakwater was to take the form of an island - 2660 feet long - beginning 700 feet further westward and running southward to within 800 feet of the head of the original breakwater completed in the 1880s. Apart from giving an enlarged sheltered area of 660 acres it was argued that the two passages provided between them would facilitate the easy ingress and egress of ships. Besides, the two passages, it was expected, would ensure a current through the harbour sufficient enough for sanitary purposes. The plan was acceptable by the Legislative Council and the loans were sanctioned, but the construction, like in the case of the earlier breakwater was to be undertaken by the Public Works Department with M/s Coode, Son and Mathews as Consulting Engineers (The Engineering, 1906-751, A.R. Director, PWD).37

The extent of exposure to the violence of the sea, like in the case of the breakwater constructed earlier was to be the determining factor in the selection of the type of breakwater to be built. Accordingly, the North East Breakwater was to be Rubble Mound, whereas the North West Breakwater was to be of concrete blocks. For the supply of suitable rubble and stones

a quarry of 5 1/2 acres was opened at Mutwal in 1894 (CO 54/678, 1903).³⁸

The provision of space for shipping was the most pressing problem but not the only one to be resolved. The rapidly increasing resort of steamers to Colombo brought in its wake other problems and of them what required urgent attention was to upgrade the facilities for coaling so as to maintain Sri Lanka's enviable position as a Coaling Station. The annual average import of coal to Sri Lanka that was 148,418 tons in the years 1880-84, Colombo's share was 53%. With the transference of shipping from Galle after 1881 Colombo's share rose still further to the extent of enjoying a monopoly position in the coal trade. For example in the years 1890-95 it averaged at 409,265 tons and of that Colombo, accounted for 98%. The same position was maintained thereafter, even when for instance, imports averaged at 629,463 tons in the period 1905-1909 (A.R., PCC; Ceylon Government Blue Books).39 In the 1880s the simple bunkering facilities for coal consisted of twelve acres of land covered by corrugated galvanised iron on which the commodity was stored. The plots within this area were given on long lease to the principal steamer companies patronising the Port, the P & O and the Messageries Imperiales and nine firms of coal importers at an uneconomic rent. The lessees had erected jetties in front of the leased out plots which were used to store coal as well as to take them to steamers with the help of barges numbering nearly 200 and occupied about 7 acres of the valuable sea frontage. The colliers that brought coal to Colombo as well as the steamers that called to coal were not an exception to the general rule of being moored. It was to answer this problem that a decision was taken in 1902 to construct 18 jetties at an estimated cost of £84,000 projecting into the harbour area, 190 feet long with a width of 30 feet; and the space between the jetties was to be 90 feet. In order to recoup the cost of construction of the jetties it was decided to lease the coaling plots from which the jetties project for about

Rs. 9000 an acre per annum. When completed in 1906 it was to give storage facilities for 250,000 tons of coal and the space between the jetties was such that two barges could operate at a time with ease (CO 54/679, 1902).⁴⁰

The other important trades that were fast gaining ground at Colombo were the passenger traffic and supply of water to shipping, which too demanded facilities by the late nineteenth century. The former fell into two streams, the European and Indian immigrant labourers. To deal with the first, these affluent passengers formed into two categories. There were the tourists, who because of the cheapness of hotel accommodation compared with the winter resort of Egypt began to come in large numbers since the eighties. Such passengers that numbered less than 2000 in 1883, went up to 2,654 in 1887, to 3,086 in 1892, to 4,726 in 1895, and to 6,430 by 1905 (A.R. PMO of Health).41 Much more numerous, however, were the passengers in transit. Colombo, more than any other port in the region was centrally situated to attract that class of tourists. It was from Colombo then that a traveller from any port in the Indian Ocean could find a vessel to any part of the main ports in the world, and it was through Colombo that many passengers from Europe or the Far East or Australia passed to India. Numerical evidence of such passenger traffic is difficult to find, but according to contemporary commercial literature, Colombo's transit passengers averaged at 25,000 at the end of the last century (Ferguson, J. 1903-75).42

The handling of that type of passenger traffic that was increasing rapidly created no serious problem for the Port, as it was no exception to the lighterage system in vogue in respect of other trades. Even then, there was the problem closely related to the passenger traffic of this category but which was outside the responsibility of the Port, namely the supply of large quantities of water of high degree of purity to passenger ships. Until 1887 the only water supply came from wells and

canals which was scarcely sufficient even to meet the growing needs of the city, and in the early 1880s not more than 4 million gallons were supplied to shipping. It was as an answer to this problem of the city that the government, therefore, took steps in 1886 for the supply of pipe borne water from a reservoir constructed at Labugama, about 30 km off Colombo. That supply was available from 1887 and by the next decade ships were taking approximately 24 million gallons a year. The Colombo Municipal Council sold the water on meter to the middle men at the rate of one rupee per 1000 gallons while the latter supplied it to ships at Rs. 3.50 per 1000 gallons. The water was drawn from pipes at the harbour front and was delivered to ships moored in the harbour in specially constructed water boats equipped with steam pumps and boilers (SP XXXI, 1886, 387).⁴³

The Indian immigrant labour or better known as the plantation coolies constituted the largest section of the passenger traffic of Colombo towards the end of the 19th century. Before the nineties most of them, nearly two thirds, used the cheaper overland route to the expensive sea route from Tuticorin to Colombo. The northern route although cheaper, it entailed walking more than 170 km to the plantations through inhospitable countryside and the death rate was very high. As against the cheaper but risky overland route the passage by sea was not only expensive but the sailing vessels used for the purpose were unhealthy. For they were polluted with vomit excreta etc. and the holds were without ventilation. By the late eighties, however, the BISN (British India Steam Navigation Company) was beginning to use steamers for this trade and the railway fares were being reduced. These two developments caused the abandonment of the overland route and by 1899 only a third of the plantation labour used it. Consequently, the flow of such immigrants to Colombo which was a trickle in the seventies turned out to be a flood by the late eighties. It rose from an average of about 28,000 in the late eighties to 70,791

in 1892 and to a peak of 207,299 by 1900 (A.R. Immigration and Emigration).⁴⁴

As the number of immigrants increased in this fashion the simple and primitive method of quarantine became unsatisfactory. The prevailing system was for the immigrants to receive a bath and meals and were entrained to the plantation region by train from the Fort. But with the spread of plague in Bombay in 1896 more stringent quarantine measures had to be taken not only to prevent the disease being introduced to Sri Lanka but also to safeguard Colombo's international reputation as a healthy port. More importantly, it became obligatory for Sri Lanka to conform to the measures adopted at the International Sanitary Convention held in Geneva in 1897 which included compulsory medical inspection by day on shore; compulsory rigorous disinfecting on shore; and the prevention of embarkation of any person showing symptoms of plague. In keeping with these regulations Sri Lanka took steps for the segregation and quarantining of Indian immigrants in an isolated site at Ragama, about 12 km from Colombo. In 1905 a further measure was taken by the erection of a disinfectant station at the root of the South West Breakwater. Since these services were essential for the functioning of the Port and also in the interest of the country's foreign trade for which Colombo was the only outlet, the expenses involved were charged to the government health budget. In effect, it therefore, meant a concealed subsidy to the Colombo Port authorities.

In view of the inherently unique functions that Colombo was called upon to perform towards the latter part of the century, the provision of most of the facilities stated in the preceding account seemed justifiable. But, certain unforeseen developments compelled the Port authorities to make investments, which in ordinary circumstances would have been outside the Port's responsibility (A.R. Colombo Port Surgeon 1897-1906).⁴⁵

Normally, dry docking facilities were provided in a terminal port and not in one like Colombo where its imports and exports were handled by passing vessels. Besides, the records at the Port of Colombo also showed that since 1882 not more than 10 vessels had arrived in Colombo in a state which would have led them to use facilities of a dry dock had one been available. Therefore, the commercial viability of a dry dock at Colombo seemed negligible, which was further strengthened by the fact that nearby Bombay and Singapore had already installed dry docks (CO 54/625, 1895).46 Nevertheless, the needs of the Royal Navy superseded the commercial argument and eventually led the construction of a dry dock at Colombo. Towards the end of the 19th century the navy could find adequate docks around the periphery of the Indian Ocean such as at Cape Town, Aden, Bombay, Calcutta and Singapore but not in the middle of the region. In the midst of international rivalry it came increasingly important to fill the gap and Sri Lanka because of its central position in the Indian Ocean was the obvious choice. The argument received additional weight in view of the fact that Trincomalee since the days of the sailing vessels had been providing such facilities for the Royal Navy. To serve both naval and commercial interests a decision was hence taken to transfer the facilities from Trincomalee to Colombo (The Engineering 1906-750).⁴⁷ Given the strategic value of any dock at Colombo and also given the fact that it will be of some commercial value, a decision was taken that the cost of construction should be shared equally between the imperial and the colonial governments. The estimated cost was £318,800 and the work was begun in 1899 and saw completion in 1906.

For the too smaller vessels that served Colombo, which were substantial found the dock unprofitable to use and consequently to meet their demands it was proposed to construct a slipway at a substantially lower cost of £33,000. Since the operation cost was calculated to be only £900 the

construction of the slipway was considered to be a financially viable proposition (S.P. IX of 1897).⁴⁸

The expeditious shipping operations very largely depended on the lighterage system as it also helped shipping operations to be effected from both sides of the vessels. However, the success of that system depended largely on an uninterrupted supply of boats. The private lighterage companies had their own boat building yards but were situated a long distance from the Port, and moreover, were inadequate to meet the demand for boats. This was particularly the case in respect of barges to carry on the coal trade. Experience showed that of the 200 to 300 coal barges, nearly 15% were laid up at a time for want of repairs. Hence it was decided to construct a barge repairing yard which was a collateral industry to the coal trade, and the site selected was to the south of the coaling depot. The estimated cost was £109,000 (S.P. XXI, 1894).⁴⁹

These facilities which formed the second programme of port development consisting the two breakwaters - NE and NW, Fishery Harbour, Graving Dock, Slipway, Boat Repairing Yard, Coaling Depot and 18 Coaling jetties was commenced construction in the mid 1890s and was completed by 1906. However, as shipping increased to such an extent with the addition of these facilities once again signs of strain began to appear. The growth of shipping was so spectacular that in 1906 with a total tonnage of 6,281,164 entering the Port of Colombo ranked as the fifth great port, among the British colonial ports in Asia trailing only behind Singapore with a tonnage of 6,466,411 (Report on the Blue Book, 1907).50

The answer to the strain caused by that growth of shipping lay primarily on the provision of more space through seaward extension of the port. Unfortunately, that apparently was an impossibility because of the two breakwaters and the only alternative that was practicable was capacity extension by

means of a wet dock. However, the practicability of such a dock became questionable largely because, a wet dock was used by vessels that came fully laden and were prepared to remain in the port longer than the passing vessels. As referred to earlier the only vessels that came fully laden were those carrying food cargoes and the large majority were visiting vessels whose visits were of short-duration. Besides, the cost of providing a wet dock was estimated at £3 million which was higher than the cost of port facilities provided since 1875. In any case more funds were required to provide cargo handling facilities on which work was already commenced. The provision of the two facilities too had to be funded from loans and the port revenue had to bear the interest on them (CO 54/701, 1906).⁵¹

A closer analysis of the increases in the tonnage of shipping on the other hand, revealed that the need to provide additional space would not arise and the problem could be solved by the maximum utilisation of the existing facilities. This, it was presumed could be achieved by rendering improvements to existing facilities the cost of which could easily be covered by port revenue. The impediment to the use of facilities to the maximum, seemed to have arisen from two factors: the coaling facilities provided seemed ample but could not be used throughout the year unless protection from the rough sea was given. Secondly, the increase in the tonnage of shipping at Colombo was not due to an increase in the number of vessels calling at the port but was a result of an increase in the dimensions of steamers. Consequently, steps were taken after 1906 in respect of those two aspects and they constituted the last of the series of sea works undertaken since 1875.

The Prolongation of the South-West Breakwater

As the period of completion of the coaling jetties approached, it became evident that during the south west

monsoon, the water in the neighbourhood was of a more disturbed character than had been anticipated when the scheme was advocated. Experiments in loading and unloading coal were made, and subsequently the government appointed a Commission to inquire into and report on the new coaling jetties. The findings of the Commission proved that the new jetties were not usable continuously throughout the year. Hence, in order to make the jetties available for coaling throughout the year, the Commission recommended one of two alternatives. Either additional protection from the sea must be provided so as to make coaling practicable in all weathers, or supplementary coaling grounds be made available when the new jetties were inaccessible (SP XII, 1908).52 Out of these two alternatives the former appeared feasible and therefore, a decision was taken to prolong the South West Breakwater at the end of its straight portion in a northerly direction for a distance of 1800 feet, thereby overlapping the southern entrance, and diverting the waves from the South west monsoon in preventing them from entering the harbour. This scheme which also covered the approaches to the dry dock was estimated to cost £ 440,000. The work on the project was started in 1906 and was completed in 1912 (CO 54/703).53

As the new arm was to be constructed in the heavy seas it was decided that it should be constructed in the same way that the South West Breakwater was constructed. The arm was founded on a rubble mound 30 feet below water level, built of concrete blocks. It was 38 feet wide at the base, and 36 feet wide at the capping. The capping was of concrete in mass. The granite rubble forming the mound was deposited from barges on to the sea bed. Divers dressed the top of the mound when the height was about 30 feet 9 inches below low water. The concrete blocks used in the main structure were generally 30 tons weight, and were formed in a block making yard, to be removed in wagons, deposited by a Titan crane, and were laid in exact position by divers.

The arm terminated at the seaward end 60 feet in diameter built of heavy concrete blocks in horizontal courses, the outer blocks being dwelt together in the various courses with the light house work. It was 24 feet wide, constructed of horizontal blocks, and founded at a depth of 37 feet below low water. The jetty had boat steps and landing stage on the landward side, in order to render the communication with the lighthouse possible during the monsoons, when heavy waves ran over the break water generally. The landward end of the additional arm was built against the outer face of the South West Breakwater, was filled with heavy concrete blocks deposited pell mell, in order to absorb waves at the re-entrant angle and to form a recoil (The Engineering 1912, 721).⁵⁴

In addition, the foundations of the arm, as it was lately done, in the case of the South West Breakwater, were protected by wave-breaker blocks each of 30 tons. This wave-breaker apron which extended from the full length of the seaward face of the arm and which too was built out of additional loan funds helped to effect a large saving on annual maintenance costs (Governor's Address, 1912).⁵⁵ On the head of the additional arm there was constructed a lighthouse built of concrete in mass. The height of the tower was 36 feet 8 inches with the focal plane of 58 feet 13/4 inches above low water level. The tower was 23 feet 3 inches in diameter at the base, tapering to 17 feet while the diameter of the lantern platform was 22 feet. There was fixed a second order fixed diaptic occulting light of an intensity of 4800 candles red (The Engineering 1912, 731).⁵⁶

The other measure taken in this regard was extensive dredging of the harbour to accommodate vessels of long draft. From the early 1890s the Suez-Canal was being dredged to reach a depth of 32 feet 9 inches and by 1908 was expected to dredge further to reach a depth of 36 feet. This meant that Colombo had to accommodate larger steamers than expected when the second port development programme was launched in

the 1890s. By 1905 it was estimated that nearly 3 million feet of mud would have to be removed within a time frame of 10 years at an estimated cost of £ 12,000 to reach that target and hence the dredging operations were commenced in 1905 (CO 54/699, 1905).⁵⁷

Besides, there was also the need to provide two other facilities that had escaped the attention of port planners in the nineteenth century. One was the workshop for the dry dock so as to attract more vessels for repairs. The Walkers who have been engaged in minor ship repairs became the obvious choice for that type of activities and so a 10 acre block of land near Kochchikade was leased to that firm for the purpose for 25 years. The rent was fixed at Rs. 37,487 for the first six years and at Rs. 35,528 for the remaining years. The firm was to supply its equipment and maintain the workshop at its own expense. The government reciprocated by constructing a minor railway line linking the dry dock to the main line to facilitate the movement of timber and other materials (CO 54/745, 1911).⁵⁸

The advantages of wireless telegraphy as was begun to be used at sea by 1900 too was not foreseen by those involved in Colombo's port development programmes in the late nineteenth century. Information regarding docking, berthing, amount of coal for bunkers, shipping stores, shipping space available for cargo, the arrival time of vessels etc. were considered to be the more important advantages to be derived from wireless telegraphic facilities at a port at that time. These were benefits that Colombo, a premier port of call in the region could not possibly overlook. Above all, as by 1909, Aden, Colombo's main competitor had already installed this facility which more than anything else prompted the port authorities to provide the same for the benefit of the shipping patronising the Port. The first radio station in Sri Lanka was thus erected in Fort in 1912 for service between the ships and shore at a cost of £9000 and

was to be run by the Telecommunications Department (CO 54/726, 1911).59 The provision of these facilities under the second port development programme not only required more capital and, therefore, more extensive borrowing than the earlier programme but also more labour. The available figures as shown in Table 1.6 show that like in the case of the first port development programme in the second stage too prison labour was extensively used. Prison labour alone, however, did not solve the labour problem in view of the fact that skilled labour too had to be employed which could only be procured in the free labour market. This was not an insurmountable problem since that type of labour was available in plenty from among Indian immigrants in the city. Fragmentary evidence suggest that the number of free labour employed rose from 60 in 1899 . to 2600 in 1902 and dropped to about 700 as the works neared completion (A.R. Harbour Engineer 1900 and 1906. The Engineering 1902, 355).60

Table 1.6

Number of Convicts Employed Port of Colombo 1894-1911

Daily average number of convicts employed
210
538
545
676
628
573
314

(Source: A.R., The Harbour Engineer, Annuals)

The phase two of port development programme which required substantially large dozes of capital than the earlier one was also executed out of loan funds under the same conditions of repayment. Moreover, except a local loan of Rs. 533,444 at 4% interest raised in 1892, all other loans, the particulars of which are given in Table 1.7 and were raised in the London open market.

Table 1.7

Loans raised Port of Colombo 1893-1909

YEAR	Amount	Rate of interest	Rate of sinking fund	Year of final settlement		
	£	%	%			
1893	597,492	3	1	1940		
1900	767,584	3 1/2	1	1940		
1909	587,584	3 1/2	1	1959		
-do-	139,864	4	1	1959		

(Source: S.P.X of 1913: Colombo Port Improvements)

In May of 1912 a port development programme spanning 37 years and that primarily included sea works was completed at a total cost of £2.9 million or an equivalent of Rs. 44,052,129 on the prevailing rate of exchange. The sheltering arms covered approximately one square mile of mooring ground with 43 berths (S.P. XII, 1921).⁶¹

The completion of the two Port development programmes, besides giving Sri Lanka a valuable asset also elevated Colombo to an enviable position in the hierarchy of Indian ocean ports for expeditious discharge of vessels. So high was Colombo's reputation as an efficient port, that it soon became a

centre of attraction for shipping passing through the Suez-Canal. So much so that as indicated in Table 1.8 on data pertaining to shipping of major ports in the world, Colombo, in terms of the tonnage of shipping it handled had emerged as the seventh greatest port in the world and the third in the British Empire.

Table 1.8

The position of Colombo among the major Ports of the World, 1910.

Name of Port		Tonnage of
		vessels entered
(1) New York		12,154,780
(2) London		11,605,698
(3) Antwerp		11,005,761
(4) Hamburg		10,944,909
(5) Hong Kong		10,085,595
(6) Rotterdam		8,600,496
(7) Colombo	SVE	8,091,123
(8) Liverpool		7,747,994
(9) Marseilles		7,187,638
(10) Singapore		7,045,193
(11) MonteVideo		6,936,983
(12) Cardiff		5,771,476

(Source: A.R. P(c)C, 1919)

Inter-War Years

The growth of trade and shipping of the Port during the inter-war years did not differ much from the period 1875 to 1912 when the first ever massive port development programme was undertaken to meet the growing demands of those two branches of trades except, however, during the World War I and the subsequent post war depression (see Table 1.9). As for shipping there was no need to provide facilities, particularly

mooring grounds until 1939 as there was already sufficient space for about 40 vessels to anchor at any time of the year. Nevertheless, that programme was designed in terms of coal burning vessels and, consequently, provided no facilities for vessels using liquid fuel which as is evident from the Table 1.10 was steadily replacing the former since the mid 1920s and, inevitably, demanding increasing volumes of oil imports. In contrast with the simple facilities that the coal trade demanded, those required for oil was not only substantially more complex but also had to be carefully planned in view of the highly inflammable nature of the substance. Taking these into account what were needed primarily were: closed tanks for oil storage; measuring tanks within the harbour from which ships could be supplied; the linking of storage and measuring tanks by an expensive and an intricate pipe line system; and bunkering berths connected to the measuring tanks.

Table 1.9

The Tonnage of Shipping Entered and Cleared, the Volume of Imports and Exports and the Tonnage of Fuel Imports, Port of Colombo, 1904-1938 (Quinquennial averages, in 1000 tons)

YEAR	Shipping	Imports	Exports	Coal imports	Oil imports
1904-8	11,734	576	385	670	6
1909-13	14,202	843	467	742	16
1914-18	8,652	873	495	436	27
1919-23	12,661	888	553	655	87
1924-28	19,620	1,175	706	673	189
1929-33	22,791	1,028	693	520	244
1934-38	22,874	1,068	624	446	382

(Sources: Ceylon Blue Book, Annuals; A.R. PCC Annuals; A.R. CPC; Thirty years Trade Statistics of Ceylon by Department of Commerce, 1925-1954).

Table 1.10
The Fuel Trade in Colombo 1924-1938

Oil imports (tons)	169,328	158,550	192,348	216,616	211.720	213,458	229,834	208,024	247,091	324,588	345,800	357,725	338,401	377,741	493,584	
No of oil burners	382	388	457	534	635	774	962	1013	1049	1085	1146	1130	1164	1209	1254	
Coal imports (tons)	640,220	663,882	651,457	752,602	659,963	780,232	571,506	485,807	351,141	411,823	405,442	473,194	383,946	598,324	387,148	Colonial Andrews
No of Coal burners	2185	2278	2188	2243	2318	2430	1980	1867	1520	1420	1483	1488	1388	1525	1300	A P PCC Annuals: A P C
YEAR	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	(Sources.

(Sources: A.R. PCC Annuals; A.R. CPC Annuals.)

Unlike the coal trade, oil was a highly capitalised trade which an island economy depending on the export of a few primary products could not possibly undertake. Fortunately, however, as the oil trade was gaining ground at Colombo, there were three resourceful international oil companies interested in developing the oil bunkering trade at the port. They were the Asiatic Petroleum Company (Ceylon), the Anglo Persian Oil Company and the Standard Oil Company of New York. The first one in fact had been in general business of handling oil for shipping since 1905 (CO 54/772, 1924).62 The claims of these companies to enter the bunkering trade was, therefore, accepted and the work on the oil project was commenced in 1917. For safety reasons the oil tanks were to be located at Kolonnawa about a few kilometres inland. A sum of Rs. 850,000 was allocated to meet the preliminary expenses of preparing the site, constructing a railway, laying a pipe line and building an embarkment to carry it, installing pumping machinery, and constructing jetties for discharging and bunkering of fuel oil. While these were to be common facilities offered by the government to the companies the latter themselves were to construct the storage tanks at Kolonnawa and the measuring tanks at Bloemendhal which were some distance away from the harbour. Lastly, the two jetties required for bunkering and discharging were to be erected inside the North East Breakwater.

This programme which formed the last of the major port development activities at Colombo in the period 1875 and 1939 was completed by 1922 and the three oil companies mentioned above as well as the admiralty had each established its own storage tank for petrol, fuel oil and kerosene at Kolonnawa. To pump liquid fuel, a ten inch pipe line nearly 24,260 feet in length was also laid down along the embarkment adjoining the new railway line from Kolonnawa to the jetties with a connecting line to the measuring tanks at Bloemendhal. Also, a separate pipe line of similar length was laid between

those two places for petrol and kerosene. Moreover, the pump houses at the harbour and Kolonnawa were fitted with 180 H.P. Blackstone engines. Despite the fact that the trade had not recovered fully by the early 1920s from the post war depression, the provision of these facilities had been followed by a rapid increase in the liquid fuel trades as shown in Tables 1.8 and 1.9 and, hence, the necessity to lay down a second pipe line for which the Legislative Council allocated funds in the budget of 1923-24. The companies were also authorised to enlarge their measuring tanks at Bloemendhal (CO 54/772, 1924).⁶³

The nature of work connected with the provision of facilities for oil was such that a departure had to be made from the earlier practice of handling port construction work by the Public Works Department. The various construction works relating to that branch of trade was, therefore, entrusted to different contractors with specialised knowledge of the work concerned. Thus the laying down of the pipe lines and the erection of pumping stations were done by the Anglo-Persian Oil Company Ltd., while the construction of the two jetties mentioned earlier were done by Messrs. Topham Jones and Rounton Ltd. The building of the railway line, on the other hand, was undertaken by the Railway Department. The cost of the whole scheme of Rs. 5 million was met out of foreign loans under an ordinance of 1921. Initially, the expenditure on railway connection was defrayed by the Colombo Port Commission, but it was later decided that as the work formed part of the general railway system of the country, it should not be debited to the harbour account (S.P. IV, 1932).64

Cargo Handling

What emerges from the preceding discussion is that in the provision of facilities for shipping the primary objective had been expeditious despatch for vessels that used the Port for

short durations. The same had been true in the case of providing facilities for the merchandise trade. Other than the cheapness of casual labour that encouraged the lighterage system in cargo handling operations the same vessels that came for services brought in or took away cargo from Colombo. The few instances of vessels coming fully laden for Colombo consisted of colliers, tankers and those carrying rice about which reference was made earlier. The former types of vessels left in ballast and, moreover, by the turn of the century, even in the rice trade the use of bulk carriers ceased to be a permanent feature. With the steamers of larger size becoming numerous, a change was seen when many of the cargo and passenger liners enroute to European ports began to bring cargoes of rice which evidently averaged between 15 to 25,000 bags per ship per time (S.P. XXIV, 1879, S.P. X, 1934).65

In any case it became more economical to import the country's consumer goods of high demand to last for short periods. The perishables were one such case due to the problem of cold storage. Non-perishables like rice, wheat flour, cotton piece goods etc. although were in high demand were capable of being stored for long periods, but the narrow Pettah area lacked extensive storage facilities. The solution to the problem, therefore, was to replenish the stores constantly rather than maintain large stocks to last longer periods, which could easily be achieved by utilising the services of liners to bring smaller consignments of such cargoes (CO 54/519, 1937).66

Similarly, from the late nineteenth century when the reign of coffee was over the Sri Lankan economy ceased to be dependent on a single crop. By the opening years of this century the economy became broad based with the cultivation of tea, rubber and coconut and graphite mining. In contrast to coffee, that was a seasonal crop the production for export of tea, rubber, coconut products and graphite were spread throughout the year. Consequently, the shipment of any of

these commodities in one single instant, constituted only a fraction of what was produced in an year. This was further reinforced by the fact that the deployment of tramps to carry these products except graphite became unacceptable as they lacked 'clean storage'. On the otherhand, the slow movement of tramps affected their competitiveness through drayage. The result was that in the transport of exports too the dominance of liner shipping became a common feature and did not demand the time consuming process of going through jetties and wharves (S.P. X, 1934).⁶⁷ Hence, improvements in cargo handling mechanism in effect meant foreshore development.

There was in the first place the need to provide warehouses. In that, however, the Port was not burdened with the responsibility of meeting that demand as the resourceful export firms themselves had their warehouses in their own premises. Brooke Bonds and Liptons, for example, had their own warehouses to store tea outside the Pettah area. The same was true of other items of export. The import trade was no exception to this rule as the wholesale dealers too had their storage facilities in the Pettah area itself. The import trade in rice is a case in point as the Chetties, an immigrant race from South India who monopolised that trade had their own warehouses at sea street in Pettah. The development of transport links from the Port to these warehouses although apparently the responsibility of the Port Authorities, it was to their relief that it became the concern of both the government and the Colombo Municipality (Milburn, 1913, 168).68

In a situation as this the facilities required for cargo handling within the Port premises were simple, and fundamentally, these consisted of adequate quage and sufficient warehouse accommodation for goods in transit and essentially, that meant the provision of sheds with extensive floor area. During the early days of coffee when the volume of cargo handled by the Port was not of much significance, the landing

and shipment of merchandise was the responsibility of the Master Attendant. The customs authorities, on the other hand, were entrusted with the function of providing temporary storage (Milburn, 1913, 168).⁶⁹

The task of port authorities discharging these functions the supply of boats and warehouse accommodation together with their administrative duties could efficiently be performed, so long as the trade passing through Colombo remained small. But from 1846/51 to 1867/71 the exports of coffee increased by about 220%, coconut oil by about 430%, plumbago nearly by 3500% and the large labour population that the expanding coffee industry created resulted in the increase in the rice imports approximately by 100%(see Table 1.11). The collapse of the coffee industry in the early eighties as well as the effects of the world-wide depression slowed down the country's external trade but the recovery that followed saw the export sector, as was stated elsewhere being diversified with the entry of other commodities to that sector.

Table 1.11

Principal Imports and Exports of Sri Lanka 1846-1871
(Quinquennial averages)

YEAR	Coffee Exports Cwts	Coconut Oil Exports Gallons	Plumbago Exports Cwts	Rice Imports Cwts
1846-1851	315,049	377,217	2,874	1,059,458
1852-1856	411,264	959,468	14,047	1,307,764
1857-1861	600,942	1,234,115	16,580	1,698,581
1862-1866	785,998	1,555,431	17,978	2,120,655
1867-1871	973,975	1,655,460	47,560	2,241,940

(Source: Ceylon Government Blue Book, Annuals).

The cumulative effect of the growing labour force in the plantation sector, urbanisation and the decline in subsistence agriculture was the escalation in rice imports. At the same time the diversified plantation sector came to depend heavily on some imported inputs of which manure was a major item that added to the volume of imports. Consequently, except during the period from the late seventies and the early eighties, the total value of seaborne trade handled by the port experienced an upward movement. The value of trade that was Rs. 43,629,680 in 1855 rose spectacularly to Rs. 116,160,210 by 1877 and thereafter the trade slackened and dropped to Rs. 65,514,830 in 1886 and the recovery that followed saw it move spectacularly to Rs. 227,302,033 by 1900. From 1902 onwards, information regarding imports and exports at the Port are available in terms of quantities and according to that data the total volume of Colombo's trade (exclusive of coal and liquid fuel imports) that was 739,916 tons in 1902 shot up to 1,036,203 tons in 1907 and still higher to 1,565,591 tons in 1913 (Ceylon Government Blue Book, A.R., PCC).70 The growth of Colombo's trade in that manner naturally impaired cargo handling operations which compelled the port authorities to retire from the business of wharfingering, warehousing and supply of boats. The mercantile community that suffered most from the declining efficiency in cargo handling seized this opportunity and the earliest to come under private enterprise was the supply of boats that saw the formation of the first ever boat company in the country, the Cargo Boat and Wharf Improvement Company in 1847. This was followed by the coming into being of the Colombo Shipping Association and the Colombo Boat Company in 1868 and 1873 respectively (Villiers, 1940, 89-92).71

The next in line to come under private enterprise was the business of wharfingering and warehousing that witnessed the establishment in 1876 of the Wharf and Warehousing Company by leasing out the customs premises for an annual rent of

£1000. Although the company was resourceful and fared well at the beginning, later in the century it was not that resourceful to cope with the rapidly growing volumes of Port's cargo trade. In the midst of financial difficulties, the company also met with opposition to increasing rates which ultimately led to its liquidation in 1899. The business was sold to Bois Brothers as agents to a more resourceful Wharfage Company in London with shipping magnates representing major shipping lines on the Board of Management. The Company also built its own boat building yard in 1901 in the Kelany river while the other company that came into being in 1905 too had its boat building yard at Mattakkuliya (S.P. XXIV, 1897).⁷²

The efforts of the landing company in enhancing cargo handling efficiency was supplemented by the port authorities in expanding the warehousing facilities at the turn of the century. The construction of a row of grain sheds at Kochchikade, 130 feet long and 120 feet wide was begun in 1899 and was completed in 1901. Three years later uniform in every respect with the grain sheds was constructed a row of sheds for salt. In view of the small quantities of manure imported during the greater part of the last century there arose no serious problem to facilitate with separate warehouses for the stuff. But as the demand for manure grew by the end of the century, the necessity to separate that from other cargoes became imminent because of the Municipality's objection to the commodity being stored within the city limits in view of its odour. The problem was solved to a large extent with the construction of stores at Kelaniya outside the city by Baur and Company, the sole importer of manure.

Transhipment Cargo

In dealing with the passenger traffic reference was made about the fact that it was from Colombo that a steamer could be got to any part of the world's ports. Consequently, from the

1880s like the flow of transit passengers Colombo also began to gain ground as an important transhipment centre in the region. The expansion of tea and rubber cultivation in the region further enhanced this position of Colombo, and in the late nineteenth century transhipment cargo handled by the port that averaged at 300,000 packages a year doubled at the turn of the century and trebled at the eve of the World War I. The growth of transhipment cargo at that rate created the need for warehouses specifically built for the purpose, instead of the usual practice of mixing them with other cargoes. The reason being that it was a major source of complaint by shippers in view of the time wasted in sorting them out. Economic considerations outweighed all other reasons and, instead of constructing new warehouses for transhipment cargo, the decision, therefore, was to reconstruct, what were known as J & K warehouses with upper floors set apart for them. The reconstruction work was commenced in 1908 and saw completion in the following year and the upper floors were thereafter used for transhipment cargo. In addition, travelling cranes were installed to lift such cargoes direct from the boats to the upper storey or vice-versa (A.R., PCC, 1909).73

In the construction work connected with the provision of cargo handling facilities there was no departure from the hitherto followed practice of relying on the Public Works Department. The cost of the work had amounted to Rs. 900,000 and although official records are silent about the funding agencies, undoubtedly, the sources may have been the same as in the case of other projects undertaken earlier. According to a report of the Principal Collector of Customs submitted in 1911 the facilities available for cargo handling by that year included approximately 291,600 square feet of warehouse floor area; 4,465 lineal feet of quayage inclusive of jetties, and 771 boats consisting of 359 cargo boats, 55 water boats and 6 oil barges. As for handling of heavy cargo there were available 32 cranes of which 24 were owned by the Port

and the rest by the wharfage companies (S.P. X, 1913).74

The adequacy of facilities for the smooth flow of cargo, nevertheless, became questionable in the years following the World War I in consequence of the faster growth of trade that was reckoned to be 6% after 1906. To deal with 1,226,013 tons of cargo in 1911, for instance, there were only 291,600 square feet of quage, inclusive of jetties. The figures suggested that a lineal foot of quage and a square foot of warehouse floor area accommodated cargo at the rates of 280 tons and 4.5 tons per annum respectively. It was also found that these rates represented a very high pressure on the warehouse floor area as well as of the quage. In terms of the Port's growth of trade since 1906 it was also became evident that in future the situation would be worse. It was to the Port's disadvantage to encroach upon the water area considered so valuable to construct warehouses and quays. This was the factor that ultimately saw the implementation of the Lake-Harbour Canal Project, better known as the Canal Improvement Project at an estimated cost of Rs. 2.8 million, with two objectives in mind. One was to ease congestion in the existing warehouses within the harbour area and the other was to minimize congestion on roads by making the canal capable for the use of forty ton barges. No sooner the work on the project was in progress the plague broke out necessitating the construction of rat proof grain sheds. Being a problem of sanitation the Port was relieved of that responsibility and, consequently, it was entrusted to the Board of Quarantine and Immigration (A.R. Board of Immigration and Quarantine, 1914).75 The two granaries known as the Manning Markets and Charmers Granaries designed to store 230,000 and 650,000 bags of rice respectively were commenced construction in 1914 and were completed in 1919. Moreover, after a temporary set back due to the high cost of material the Lake Improvement Scheme was completed by 1922. The putting up of the two warehouse complexes by the above mentioned Board not only facilitated the progress of cargo handling improvements underway but was also a considerable financial relief to the Port Commission. The building of the Delft and Baghdad warehouses in 1916, for example, was a direct result of that financial relief bestowed to the Port Commission (A.R. CPC, 1922).⁷⁶

By the early twenties when the schemes regarding warehouses, quays and other ancillary works neared completion, the total warehouse area and the quayage added up to 580,558 square feet and 10,336 lineal feet respectively. These were remarkable achievements made when compared with the facilities for cargo handling available during the earlier decades. For instance, the total volume of cargo handled by the Port in 1923 being 1,413,590 tons, these increases gave rates of about 2.5 tons per square foot of warehouse floor area and 141 tons per lineal foot of quage. Whereas, in 1914 the respective rates were 4.5 tons and 280 tons. The development of the transport infrastructure, on the otherhand, witnessed the Port being linked with the main railway system and thereby helped to a large extent reduce congestion of goods and vehicles at the customs houses. Also, no more break-bulk was necessary and hence the cost of handling was brought down. Besides, the Lake Development Project facilitated direct transit of cargoes between the port and the warehouses on the Lake-Side which in turn reduced congestion on roads. Finally, the Lake became geographically and economically, a part of the Port of Colombo (S.P. XIII, 1921).77

Dock Labour

The credit for the transformation of the open roadstead to one of the busiest harbours of the world was not due only to the physical improvements effected and which were discussed in the preceding account. The attraction of shipping to a port is governed, particularly in a port of call, by the efficiency of port operations. The anchorage Port of Colombo, relying almost wholly on labour intensive methods, necessarily had to depend on the efficiency and an uninterrupted supply of labour. Therefore, the nature and source of dock labour merit a brief discussion without which the historical account of the development of the Port of Colombo to what it was by the time of independence becomes incomplete.

In contrast to the plantation sector that required a large, permanent and a resident labour force, dock labour during the period had to be casual and hence was non resident. This was as mentioned earlier primarily due to the fact that the facilities of wireless telegraphic communication between the ships and shore were not found until 1911. It meant that the arrival of vessels at the port was strictly not known. Therefore, a casual labour force in the vicinity of the port had to be found from which the stevedores could draw their dockers whenever the need arose. Due to a variety of socio-economic reasons, an analysis of which is outside the purview of this chapter, the planters could not procure their labour locally and, hence, depended heavily on South Indian immigrants who were by and large from the poverty stricken peasantry. The stevedores found it more difficult to get their labour locally because though dock labour was not skilled but was physically demanding. Inevitably, the stevedores turned to the same source, but of course to different districts, Cochin and the Malabar coast where a labour force was found who were physically strong and who had a history behind them on work in ports. Moreover, despite the existence of a number of recruitment systems, there was still the prospective employees coming on their own initiative because of the low cost of sea passage between Tuticorin and Colombo which at that time was below four rupees and, thus formed a pool of casual labourers. At the same time, although dock work was casual in theory, in practice there was every possibility of continuous employment.

The early statistics regarding immigrants to Colombo did not specify those who came for dock work but were aggregated with

those who came for plantation employment. Some indications as to the number of immigrant dock workers arriving at Colombo could be had from the records of Master Attendant who reported that in 1881 nearly 7000 would be port workers were categorised as miscellaneous passengers and in 1895,12,787 would be workers as urban coolies. The census figures of 1891 and 1911 on the otherhand, showed that dock workers together with their dependants (who were few) totalled only to 6,255 and 5,836 respectively. Obviously, these statistics indicate relatively low figures for dock work at Colombo, but in practice it was not the case as the rate of turnover among dock workers was high. The reason being that dock work was, essentially, men's work and, hence, many workers came to Colombo leaving their wives in India and returned to them after working one or two years. Therefore, it is likely that the total labour force was maintained by an influx of several thousand new comers each year. After 1914, that influx, may have increased, as by 1931, which came under the period of depression dock workers and their dependants numbered 9,349 (Dharmasena, 1981, 111-114).78 Moreover, there has been no complaints, at any time from shippers that there was a deficiency of labour. In fact by the second decade of the present century the Port of Colombo, was recognised as the leading port in the East for quick dispatch of vessels. Official records speak of the fact that operation of cargo discharge and coal bunkering and fresh water supply which were manually operated, were all in progress within one hour of an arrival of a ship. The productivity of labour was such that coaling was carried out at the rate of 150 tons per hour compared with 110 tons per hour at the beginning of the century and cargo dispatch was done at the rate of 100 tons an hour (S.P. XIII, 1921).79 Despite the fact that during the war and in the immediate aftermath of that war, although there was a short-fall in the supply of labour that did not affect the efficiency of cargo handling, as it was compensated by a simultaneous decline in the volume of cargo handled by the Port of Colombo.

Signs of decline

The preceding discussion speaks eloquently of the outstanding achievements of an open roadstead transformed into a modern port to gain fame among international shipping circles for its relatively high level of efficiency in a few decades. But that unfortunately was not to be a permanent feature. The third decade of the present century there appeared signs of decline of port efficiency that was achieved under difficult circumstances. By then ominous signs had set into most areas of Port's trades. The trend in the decline of ship arrivals and cargo output at Colombo in fact, was seen even earlier but that was very largely due to extraneous factors well beyond the control of the Port. The restrictions by England on shipping space to meet the demands of war and the German submarine menace which reduced shipping movements in the Indian Ocean adversely affected Colombo's fortunes to the extent that the port's total shipping tonnage declined to 3,646,256 in 1917 from 9,510,532 tons in 1912 and the revival came only in 1923 with the tonnage rising to 9,006,640. The cargo movements, on the otherhand, experienced near stagnation between 1912 and 1917. For example, the volume of cargo handled (exclusive of coal and fuel imports) which was 1,269,000 tons remained approximately at more or less the same level of 1,226,733 tons by 1923. The trade to suffer most, was import trade in coal that declined to 262,174 tons in 1918 from 885,661 tons in 1912, reflecting the drop in ship arrivals in Colombo. The trade never reached the former level, the reasons for which will be dealt with subsequently (Ceylon Government Blue Book).80

The data regarding the path taken by different trades of Colombo after 1912 also drive one to the conclusion that the claimed efficiency of port operations from 1912 onwards looks rather illusory. Because, most of the port improvements in progress towards the end of the last century were based on the

then existing growth of trade and shipping at the Port and if that growth continued uninterrupted the position may have been different. The basis on which the planning for quage and warehouse accommodation can be taken as an example. Those facilities were planned out on the projected growth of the Port's trade that was hardly realised. While the projected growth in the volume of cargo trade for the years 1914, 1917 and 1923 were 1,446,693 tons, 1,667,373 tons and 2,108,910 tons respectively, the actual growth of that trade for the respective years were 1,367,325 tons, 1,226,733 tons and 1,463,500 tons (S.P. X 1913, A.R. CPC, 1914-1923).81 Therefore, if the targeted volumes of trade became a reality the position regarding congestion at warehouses quays and roads would have been different. It was irrefutably so as the Port records categorically stated that in 1925 when the volume of trade rose to 1,940,930 tons congestion in warehouses was such that in the following year it was decided to construct a third Pettah warehouse and also enlarge the other two Pettah warehouses in the same location constructed under the port improvements programme of 1913 to 1923. These were completed in 1927 and brought additional floor area amounting to 12,000 square feet thereby solving the problem of warehouse floor area for the time being (A.R. CPC, 1927).82 Fortunately, for the port authorities the world wide depression, the effects of which were felt severely on Sri Lanka's foreign trade, spared them of providing further warehouse floor area. In the recovery of trade that followed in the mid thirties the volume of cargo handled by the Port was 1,756,880 tons and was slightly higher than that handled in 1913 with double the warehouse floor area to accommodate slightly more cargo. The decision of the Port Commission, therefore, was not to build new warehouses until the trade demanded except to construct a separate warehouse for cement and to build those warehouses which were beyond economic repair. The former received priority and accordingly a warehouse for cement was constructed adjoining the Charmers Granaries in 1939 but accomplishment of the latter was postponed for a future date.

From the outset it was emphasised that advantaged by its geographically strategic situation in the sea lanes of the Indian Ocean, any port in Sri Lanka was destined to serve as a port of call for shipping services and transhipments. That was the underlying factor for successive port development plans that were executed since 1875 to create a spacious harbour which had little relevance to the comparatively low volume of the country's seaborne trade. Consequently, the uppermost requirement of the Port of Colombo was expeditious dispatch of vessels calling for services and transhipments which was carried out to the satisfaction of international shipping. Together with the high level of efficiency, was the absence of ports in the region to challenge the supremacy of Colombo as a port of call. However, such advantages that the Port of Colombo enjoy did not last long. Towards the middle twenties the enviable position of Colombo in the region began to fade out with the emergence of rival ports offering services at more competitive rates. The first victim of these developments was Colombos once famous fuel bunkering trade. The decline in the coal imports continued and as was pointed out earlier it never reached the pre-war level primarily because of the coal burners were gradually giving way to diesel engined vessels. For example, the coal burners that visited the Port and that aggregated to 2185 in 1924 declined to 1170 by 1939 whereas the number of oil burners using the Port rose from 382 in 1924 to 1013 in 1931 and increased further to 1406 by 1939. The fuel oil imports on the other hand for the respective years were 169,328 tons, 208,024 tons and 451,925 tons (A.R. PCC).83 Considered Colombo in isolation, these figures are suggestive of an impressive growth in the fuel oil trade. Comparisons made with other ports in the immediate neighbourhood during the period as shown by the Colombo Port Commission nevertheless suggested that it was not a matter for complacency. This was particularly the case when a comparison was made with Colombo's main rival, Aden, which is set out in Table 1.12. It was revealed that such increases in

the volume of oil imports as well as of the number of oil burners calling at Aden had been due to the fact that many of the larger vessels were taking on enough oil from there to reach Singapore or vice-versa thus bypassing, Colombo, as a centre for oil bunkering. Similarly, dismal signs appeared in the once prosperous Colombo's trade in the supply of shipping stores. The value of that trade which was Rs. 27,876,604 in 1929 nearly dropped by 50% to Rs. 15,619,219 in 1937 and despite the recovery of prices after the depression the figure rose slightly to Rs. 18,470,258 by 1939 (Ceylon Government Blue Much more distressing was the loss of Colombo's reputation as a supplier of pure and wholesome water to shipping which was very largely due to the competition from ports in the region that supplied the same at low rates. In that Bombay and Karachchi emerged as the main rivals supplying water to shipping at less than a rupee per 1000 gallons in quite contrast to Colombo's Rs. 5 for the same quantity. The result was that the intake of water at Colombo by shipping declined to 90,076,300 gallons in 1931 from 118,834,900 gallons in 1929 and dropped alarmingly to 87,060,500 gallons in 1936 (A.R. CPC).85

Table 1.12

The Oil Trade of Colombo and Aden
1924-1932

YEAR	COI	LOMBO	ADEN			
	Average oil imports (1000 tons)	Average number of oil burners	Average oil imports (1000 tons)	Average number of oil burners		
1924-06	201	256	207	335		
1927-09	214	318	351	540		
1930-32	228	377	433	582		

(Source: S.P XIII of 1935; Report of the Chairman, Colombo Port Commission on Oil Dock, Deep Water Quays and Basin)

The fate of the graving dock was very much the same. Despite the availability of cheap labour and the possibility of getting cheaper material from India, Colombo, by now became less attractive for ship repairs due largely to a lack of publicity compared with other ports in the neighbourhood coupled with the dock being used by naval vessels for long periods to the detriment of merchant vessels. The few vessels of the latter were those that came for temporary repairs sufficient to allow them to proceed to another port where more permanent work could be done (S.P. XII, 1921).86

The extent of Colombo's decline as a port of call was more concretely shown by port statistics regarding the visits of ships by purpose than those dealing with shipping services. From 1914 to 1918, 36 percent of the tonnage using Colombo was accounted for by ships calling for services whereas from 1934 to 1938 the figure was more than halved to 11.9 percent. Consequently, it was these developments that compelled the Port Commissioner to offer a serious warning regarding the future prospects of Colombo in the following lines.

"It must be borne in mind that Colombo can no longer rest on its advantageous position in the trade routes of the East to attract shipping to its shores. Be it fuel or water, repairs or harbourage, there are well equipped ports in close proximity to Colombo offering efficient facilities at economic rates it must ere long cede its ascendancy as a port of call.... The increasing use of fuel oil for marine engine propulsion has enabled vessels to cover longer distances without stopping to re-fuel (A.R. CPC, 1936)." 87

These observations of the CPC were supported by statistical evidence. For example, in 1914-18, 36% of the Colombo's shipping was accounted for by vessels that neither took nor discharged cargo. In 1934-38 that percentage had been reduced nearly by 50% (Ceylon Government Blue Book, Annuals).88

Table 1.13

Revenue and Expenditure, Port of Colombo 1912/13 - 1938/39 (Quinquennial Averages)

Net Deficit	Rs.	enio li eno bierio li eni li eni	2,048,767				NA	NA
Net Surplus	Rs.	129,460		768,761	457,804	554,753	NA	NA
Interest and Sinking Fund	Rs.	1,663,157	1,499,353	1,820,908	1,677,102	979,321	NA	NA
Surplus	Rs.	916,363	58,945	2,589,669	1,790,729	2,365,840	1,847,027	1,897,856
Expenditure	Rs.	2,333,309	3,545,625	2,797,442	4,326,789	3,377,174	4,577,589	4,590,127
Revenue	Rs.	3,249,492	2,996,211	5,387,111	6,121,519	5,743,014	6,424,616	6,487,983
Period Digitized by noolaham.	y Noolah org aav	4 1915/13 - 1916/17	org 07/178 - 1921/22	1922/23 - 1926/27	1927/28 - 1931/32	1932/33 - 1936/37	1937/38	1938/39

(Sources: A.R. PCC, CPC Annuals)

For that, however, the CPC alone was not to responsible. Inspite of the CPC's argument that a reduction in the price of water would increase the total income from sales, the Municipality was not in a position to make any concession at a time when it was itself in financial difficulties (Chairman, CMC 1937).89 Although the other matters were more directly the responsibility of the CPC the years of actual depression were considered inappropriate for expensive undertakings. However, with the tapering down of the depression an improvement in the Port's financial position was taking place (Table 1.13). The improvements in the port's financial position after the period 1917/18 to 1921/22 were such that the Port was enjoying substantial net surpluses that continued until the early 1930s. The accounts of the Port after 1936 give gross revenue and working expenditure figures only and are silent about capital charges etc. Therefore, it is difficult to provide data regarding net revenue surpluses from 1936 onwards. There is no doubt that the Port was enjoying net revenue surpluses during those years as the CPC records particularly of 1937 and 1938 speak of savings on capital charges amounting to Rs. 337,249 and Rs. 529,510 respectively.

Notwithstanding the improved financial position, in the provision of Port facilities during the late 1930s priority was given to those that were considered urgent. There was the construction of an Inner Dock 350 feet wide, and 20 feet deep at a cost not exceeding a million rupees. The work on it was commenced in 1936 and completed in 1938 after which it was used for harbour and small naval craft so as to permit the larger dock for the use of the bigger mercantile vessels (A.R. CPC, 1938). Thereafter attention was drawn on the provision of facilities for fuel oil the urgency for which was guided by two considerations. One was a precautionary measure to locate oil discharging facilities away from other vessels. The other was the installation of alongside berthing facilities for the use of oil burning vessels with larger dimensions. To meet these

requirements although the legislative Council approved the Port Commission's Scheme for the construction of a basin, an oil dock and deep water quays at an estimated cost of Rs. 12 million, the intervention of the war made the implementation of the project to be postponed (CPC, 1939).⁹¹

To sum up the historical background to the present volume, the transformation of the open dangerous roadstead serving a narrow hinterland into the premier port of Sri Lanka was accomplished with the construction of massive breakwaters spanning nearly four decades. Long before the completion of the Harbour Works the Port of Colombo by embracing the whole island as its hinterland and also because of concentrating on Colombo of shipping visiting the shores of Sri Lanka stifled the rise of other ports, especially Galle and Trincomalee. The geographically strategic location of Sri Lanka in the sea lanes of the Indian Ocean together with the high level of efficiency displayed in port operations, Colombo became a world renowned port. In terms of tonnage of shipping handled it overshadowed most of the regional Ports. What was more all loan repayments in connection with funds borrowed for the different development projects executed since 1875 were completed by 1959. (See Table 1.7) An attempt will be made in this study to critically examine the course followed by the Port of Colombo against the background of different economic policies pursued by Sri Lanka in the post independence period.

the installation of alongside berthing facilities for the use of oil

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Chapter II

The Port of Colombo 1940-1956

The years 1940 to 1955 marked a period of unexpected prosperity for the Port of Colombo in almost all spheres of its commercial activity. This was particularly so in comparison with the inter-war years when dark clouds began to appear in the Port's economic horizon. Statistical evidence regarding the Port's performance during the World War II is scarce. Nevertheless official records of the CPC reveal that the highest records kept in 1919 after World War I were dwarfed by the figures in World- War II, of tonnage handled, number and tonnage of shipping using the Port and the use of port facilities. financial performance the situation, however, was less remarkable until the cessation of hostilities. Due mainly to the considerable increases in wages to labour, as well as the cost of material and equipment, expenditure too found new high levels. In 1945 / 1946 Port expenditure had soared to the phenomenal figure of over Rs. 7 million from nearly Rs. 2,800,000 in 1938 / 1939. Although the revenue kept pace with expenditure, the margin of profits therefore, was considerably reduced to less than Rs. 1 million in 1945 / 1946 from nearly Rs. 3.6 million in 1938/1939. (CPC, 1946).1

With the cessation of hostilities in 1945 the economic recovery began and reached a climax in the early 1950s. In that economic recovery although independent Sri Lanka was spared of heavy capital investments on infrastructure development in scale comparable to those of colonial times there still was the need for effecting some Port improvement. In the first place there was the urgency to improve those facilities that were subject to wear and tear due to prolonged use and, secondly to provide additional facilities to meet the demands of the time. The need for the latter was a result of the growing volume of cargo with the economic recovery and the use of the Port by vessels of larger size.

By and large, the growth in the merchandise trade of the Port was a result of increased import capacity of the country generated by its growing foreign reserves since the forties. The stock of foreign assets that was as low as Rs. 275.1 million in 1939 more than doubled to Rs. 989.0 million in 1948 and in three years thereafter rose sharply to the record level of Rs. 1,185.3 million. The Korean boom that pushed up prices of Sri Lanka's primary products, that of rubber in particular was the major contributory factor for the sharp rise in foreign reserves after 1948. (Central Bank, Annual Report 1955)²

Thus, besides a valuable asset, the Port of Colombo, Sri Lanka, also inherited a large stock of foreign reserves from the British administration which could be used for its own advantage. The rationality or otherwise of the way in which the external resources were utilised does not come within the purview of this discussion. Yet, some analysis of the trade policy following the post war economic prosperity seems plausible in view of the changes it brought in its wake in the fortunes of the Port of Colombo.

The Growth of Trade

The government of Sri Lanka which continued with certain import and foreign exchange restrictions originally pursued by the British administration to regulate a run down of Sri Lanka's external balance with the United Kingdom abandoned them with the improved balance of payments in the early fifties and introduced an open-market economy policy in Sri Lanka. (Premachandra and Jayasuriya. 1994, p. 9).³ The growth in the volume of Port's trade that followed, the increases in the volume of imports (Table 2.1) was very substantial. Stated in percentage terms the increase in the total volume of cargo trade in the quinquennial 1939-43 to 1954-1958 was 79.8% while that of imports was 93.8%. Whereas, the volume of exports registered a percentage growth of

55.88% substantiating the view that it was the growth in imports that added to the total volume of the Port's cargo trade during the post-war years. By the early 1950's the items that bulked the import trade at Colombo had been those in the category of general cargo which, for example, increased from 1,140.00 tons in 1939, to 1,550,000 tons in 1950. Within the category of general cargo it was food cargo comprising mainly of rice, sugar, wheat flour in bagged form that saw a remarkable increase from 692,000 tons in 1939 to 834,000 tons in 1950 (CPC).4 Because of the food subsidy after independence the volume of rice imports showed the greatest increase within the category of food cargo. As for example, the volume of rice imports that was 116,740 tons in 1939 rose to 386,000 tons in 1952, to 386,000 tons in 1952 and shot up to 471,000 tons in 1957 (Ceylon Customs).5 On the whole, it was therefore the increase in imports that was the fundamental cause that helped the Port to maintain its flow of cargo at a uniformly high level in the year 1948 to 1957. This was despite two of Colombo's foremost branches of trade which bulked its dry cargo trade suffered severe setbacks.

Table 2.1

Volume of Imports and Exports, Port of Colombo, exclusive of
Coal and Oil imports, 1939-1958
(quinquennial averages in 1000 tons)

YEAR	Imports	Exports	Total Imports & Exports
1939 43	1,050	612	1,662
1944-48	1,414	627	2,041
1949-53	1,643	745	2,388
1954-58	2,035	954	2,989

(Source: CPC Annuals)

The transhipment trade that was one of Colombo's main strengths for decades encountered a downward trend in the thirties, but began to recover slowly and steadily during the next decade. In the aftermath of the war the transhipment trade experienced a growth in such a manner that by 1950 Colombo handled 63,000 tons of transhipment in contrast to 38,000 tons handled in 1948. Thereafter a marked decline was seen and by 1953, the trade had declined to the low level of 34,000 tons, but rose suddenly to the very high level of 86,093 tons in the following year. That marked the peak year for the trade and thereafter the downward turn proper began pushing one of Colombo's traditionally famous branches of trade to the background. By 1955 the tonnage of transhipment had dropped to 52,395 and two years later to 18,008 tons (See Table 2.2).

Table 2.2 Colombo - Tonnage of Transhipment Cargo (Freight Tons) 1948 - 1959

YEAR	TONNAGE	YEAR	TONNAGE
1948	32,520	1954	80,093
1949	55,538	1955	52,395
1950	63,304	1956	30,953
1951	55,459	1957	18,008
1952	34,174	1958	4,073
1953	50,468	1959	2,802

The change from coal to liquid fuel in engine propulsion in ocean going vessels made Colombo's coal trade subjected to a similar fate as and brought to a position of insignificance among various branches of Port's trades. Ever since the steamer came to stay as the mode of ocean transportation, the coal trade of the Port moved rythmically with the ups and downs of ship calls on the shores of Sri Lanka. From the 1930s, the reign of the steamer in ocean transportation began to be eclipsed by the diesel engined vessel. That in turn was reflected in the Port's coal trade as fewer and fewer number of

vessels came to coal at Colombo. In consequence, coal imports at Colombo that was 500,807 tons in 1940 dropped approximately by 50% to 218,188 tons in 1943. With a slight recovery thereafter the trade fluctuated between 286,002 and 378,737 tons during the year 1944 to 1950. Despite the post war recovery of Colombo's trade and shipping, the coal bunkering trade thus saw no improvement and by 1957 it had dropped still further to 216,000 tons which was slightly more than half the coal imports of 1940 (PCC).6

Table 2.3

Total Volume of Cargo handled by the Port of Colombo,
1943-1957

(including imports, exports, coal, wet cargo transshipment)
1943-1948

YEAR	Total Volume of Cargo(tons)
1943	2,803,291
1944	3,380,951
1945	4,148,255
1946	2,879,371
1947	2,831,404
1948	3,387,041
1949	4,026,495
1950	4,068,368
1951	4,252,117
1952	4,113,361
1953	4,146,567
1954	4,158,966
1955	4,112,390
1956	4,410,205
1957	4,488,448

Source: CPC

During a period when two of Colombo's traditionally important branches of dry cargo trade were on the verge of collapse, it was rational to expect the total volume of cargo handled by the Port to decline. But on the contrary in the years

immediately after independence it was growing faster. (See Table 2.3). The total volume of cargo that the Port handled which was moving at a slow pace from 1943 to 1947 experienced an accelerated growth that continued upto the year 1957. The volume of Colombo's cargo trade that averaged at 3,224,654 tons a year from 1943 to 1947 had risen to an average of 4,118,505 tons a year in the subsequent ten years recording an inter-period growth of nearly 28%.

The secret of growth of the Port's total volume of cargo in that fashion was due to no other reason than the growth in the volume of wet cargo imports. On the one hand the free movement of shipping in the Indian Ocean after 1946 revived Colombo's role as a Port of call for services of which its main attraction by then had been bunkering of fuel oil. The growth in cargo trade on the otherhand was another attraction for vessels to call at Colombo. Since the common demand of all vessels calling at the Port was fuel oil, the wet cargo imports at Colombo increased substantially (see Table 2.4) to a level that it more than compensated the short falls in the coal and the transhipment trades and in consequence the Port was able to maintain the volume of cargo at a higher level.

Table 2.4

Total Volume of Wet Cargo handled by the Port of Colombo
1943 - 1948

YEAR	Wet Cargo (Tons)	YEAR	Wet Cargo (Tons)
1945	1,619,650	1952	1,258,563
1946	794,899	1953	1,134,089
1947	629,960	1954	1,053,703
1948	882,287	1955	1,095,468
1949	1,287,866	1956	1,296,939
1950	1,317,164	1957	1,673,224
1951	1,356,735		and the same of

(Source: CPC Annuals)

While accepting the fact that the remarkable increase in the volume of wet cargo handled by Colombo after 1946 was primarily a result of the lure of ships to Colombo for services there is also the need to examine the reasons behind the sharp increase in the tonnage of shipping calling at Colombo. The answer lies in the fact that it was more the deployment of large sized vessels in the Indian Ocean trade than the rise in the number of vessels visiting the Port which very largely contributed to the growth of its shipping tonnage during the post war years. The statistics regarding shipping calling at the Port from 1940 to 1950 prove that (Table 2.5) the increase in the number of vessels calling was not of so great compared with the growth in the shipping tonnage. Therefore, from the point of view of Port development one of the urgent requirements appeared to be the provision of deep water quays. As a matter of fact as far back as in 1946 the CPC was made aware of the need to provide that facility for shipping as soon as circumstance permitted (A.R. / CPC - 1946) .7

Table 2.5
The Number and Tonnage of Shipping Calling at Colombo
1940 - 1950

(Exclusive of Men of War and Transports)

YEAR	No of Ships Calls	GRT
1940	1,848	7,350,937
1941	1,661	5,542,324
1942	1,230	3,549,539
1943	1,074	3,380,257
1944	1,555	4,353,807
1945	1,039	3,958,101
1946	1,362	5,168,465
1947	1,561	6,127,904
1948	2,054	8,732,381
1949	2,584	11,747,518
1950	2,700	12,344,074

(Source: CPC Annuals)

Table 2.6
Revenue and Expenditure of Port of Colombo 1943/44 - 1957/58
(Quinquennial Average)

YEAR	REVENUE	EXPENDITURE	PROFIT/
			LOSS
	Rs.	Rs.	Rs.
1943/44 - 1947/48	8,148,400	7,691,218	+ 457,182
1948/49 - 1952/53	18,405,194	14,123,367	+ 4,281,827
1953/54 - 1957/58	22,987,061	19,052,427	+ 3,934,464

(Source: CPC annuals)

The post war developments in trade and shipping in such a manner consequently, became compelling reasons for the first ever port development programme to be launched by independent Sri Lanka. It was a fortunate coincidence that when the urgency for port improvement arose the Port of Colombo was earning sufficient revenue surpluses to warrant it a practicable proposition. The revenue surpluses that the Port was enjoying in the early forties which as stated at the outset were marginal, appreciated considerably afterwards due to the faster growth of trade and shipping.. For instance, while the annual average revenue surplus of the Port in the five years 1943/44 to 1947/48 was Rs. 457,182 that of the subsequent five years rose astonishingly to Rs. 4.3 million. (See Table 2.6) More importantly, certain developments within the Port that affected the smooth flow of trade and shipping gave added weightage to make use of the revenue surpluses to undertake such programme of port development activity feasible. The port improvements undertaken between 1950 and 1956 at a cost of Rs. 110 million was thus the result of these developments in the post-war years. It must however, be emphasised that the improvements carried out in the fifties were primarily aimed at meeting the immediate requirements arising from the growth in the volume of trade and shipping as there is absolutely no evidence of any traffic forecasts being made. The project items included in the

programme of Port development, the details of which appear below, therefore, were fundamentally the provision of deep water quays for ocean going vessels of larger size and adequate warehouse and transit floor area.

YEAR

1950-1954 - "Queen Elizabeth Quay (QEQ) with fourtransit sheds and four berths:

1950-1956 - "Delft Quay" which was later named "Bandaranaike Quay (BQ) with four berths, two transit-sheds:

Prince Vijaya Quay (PVQ), two berths with

two transit-sheds and a warehouse: and Oil dock (North Pier 335 m long, South Pier 300 m long (Dharmasena, 1987, p.124) 8

Decline in Port Efficiency

The expectation that the port improvement project executed in the fifties would answer the demands of growing trade and shipping as well as of relieving congestion the signs of which appeared in the thirties hardly materialised. Instead, the Port of Colombo which had enjoyed the reputation of being one of the greatest ports in the East for efficiency and which played a leading role in the Eastern theatre of war entered a dismal period in its existence as a developed port. Stated broadly, many of the ills of the Port in the fifties sprang from the problems of warehousing and labour unrest, the latter being the more serious cause. The former arose from the fact that inspite of the creation of addional warehouse floor area that was found to be insufficient to cope with the demands of increasing trade. What became worse, however, was the fact that even the facilities available were not put to their maximum use. The import of bagged food cargo, rice, sugar, wheat, flour - became the responsibility of the Food

Commissioner's Department during the war which was continued thereafter. In contrast to the earlier system of such cargo coming in consignments there had also developed the practice of importing them in bulk. In the absence of warehouses outside the Port or in the areas of consumption it became the practice for Food Commissioner's Department to deposit them in warehouses and transit-sheds within the Port premises and what complicated matters was that they were being stored for long periods before being discharged to the consignees. That in turn was a result in the first place, of lack of co-operation between the Food Commissioner's Department, the Railway Department, the Shipping Companies and others connected with the handling of food cargo in the Port to plan out the movement of such cargoes before the arrival of ships carrying them. The other was the decline in transport capacity. Although Colombo remained a lighterage Port there had not been an increase in the fleet of lighters in keeping with the growth in the volume of trade. Between 1939 and 1951, the lighter capacity, in fact, had dropped by some 30%. Neither was there an improvement thereafter. According to information available even by 1958 the position regarding lighters was unsatisfactory. The CPC records show that the Port had 330 lighters in that year compared with 389 in the previous year and of the 330 lighters only 238 were in seaworthy condition (S.P.XXV, 1951, CPC, 1958).9 What was worse was that handcarts which formed an integral part of quayside transportation, experienced a progressive decline and by 1957 the number in use approximated to one third that were engaged in the Port in 1952. Within the various modes of transport connected with Port activities only in the case of lorries there had been some increase in capacity as the number of lorries increased to 1,720 in 1957 from 1,563 in 1952 (CPC, 1958).10

The way in which food stuffs were imported further contributed to the congestion at warehouses and transit-sheds.

The procedure in the past in the import of essential food cargoes by the government had been to arrange the arrival of ships bringing these in bulk on a phased programme which had materially assisted in reducing delays to shipping using the Port and also the operation of transport services to maximum efficiency. Latterly, due to various reasons, mostly relating to conditions in the supplying countries, this had not been possible. The change in the commercial practices at the Port, namely the numerical increase in the variety of commodities imported as well as the increase in the number of importers, also, brought additional strain on all forms of Port operations. One was the added task in the tallying of cargo in the ship and again on delivery from lighter to the quay. Secondly, additional warehouse space was required in order to sort out the increased variety of cargo, which involved further handling of the cargo itself. Finally, the Customs Department was called upon to deal with a greater number of documents (S.P. XXV.1951)11 causing additional delays in removing cargo from the Port.

Finally, the defects of administrating the Port as a government department in contrast to an autonomous authority became more conspicious as the problems of warehousing and transit-shed facilities. were aggravated with the growth in the volume of cargo to be handled. This was proved by the privileges enjoyed by the Store Keeper's Department and the Food Commissioner's Department, the two government agencies involved in the import of essential cargoes. A government appointed Commission of Inquiry to go into the affiars of the Port in 1957 made important revelations in support of this conclusion. The two departments, it was alleged, enjoying the unhealthy privilege of converting the transitsheds in the Port into temporary or in some cases permanent warehouses free of rent and thereby caused congestion which undermined efficiency of caro handling. Had the Government Store Keeper, for instance, like any private consignee, was compelled to pay rent at the prescribed penal rates on failure to clear his goods in proper time, the Commission of Inquiry pointed out, the rent which would have accrued to the Port would have been considerable. There was also the shocking exposure of certain goods lying in transit-sheds for over six months, the purpose of which was not only to quantify the losses to the Port in monetary terms, but also to show the extent of congestion in transit-dheds caused by the delay in removing government cargoes by the Government Store Keeper at the expense of other consignees at a time of increasing imports.

Similar sentiments were expressed regarding the privileges enjoyed by the Food Commissioner, by reason of inter-departmental concessions in respect of his cargoes which had been a serious cause of congestion. The congestion which had created, it was revealed had delayed in the handling of cargo of all ships in the port including vessels chartered by the government for importing rice and other food-stuffs. In consequence, considerable sums were paid each year by way of demurrage to owners of these chartered vessels. The delays were such that the owners of chartered vessels themselves complained that they would rather prefer more expeditious despatch of vessels than earning mere demurrage (S.P. III of 1957).¹²

The Labour Problem

The fast growing trade and shipping and the consequent strain on port facilities in the post-war years was not something peculiar at Colombo, but was generally experienced by ports all over the Asian region. Nevertheless, what was unique at the Port of Colombo and which affected Port operations was the emergence of a labour problem to the extent of seriously damaging its image as one of the best ports in the orient for efficiency about which reference was made

earlier. The decline in turn-round time of vessels was such that besides causing further bottlenecks in the flow of cargo it also brought adverse effects on the country's economy. However, this in any way does not mean that the Port in the past was immune to industrial unrest. There had been instances of harbour employees resorting to industrial action as a means of ameliorating their working conditions but not to the extent as it had been in the post independence period of completely paralysing port operations. Apparently, the labour problem became that serious primarily as a result of the transition from immigrant to local labour in the composition of the workforce at the Port of Colombo.

In the absence of mechanical handling of cargo, much of Colombo's high level of port efficiency that was maintained in the late nineteen and the early twentieth centuries had been attributed to the employment of an efficient labour force. The dock labour force as had been stated in the previous chapter constituted almost wholly of immigrants from South India who in many ways differed from their compatriots in the plantation sector. Compared with the latter who were physically weak and were suitable only for light work and who came with their families for a settled life, the former were superior in muscular strength, and since dock work was men's work the labour force was male dominated. Besides, dock workers who came leaving their families behind stayed for short periods in temporary accommodation around the Port and returned home after saving a considerable amount of money. The potential Port workers who came as immigrants formed a pool of casual labour from which the stevedores drew their labour as and when required. The immigrant dock workers whose main interest was to earn as much money as possible did not resort to strikes, work stoppages or absenteeism. Hence, rarely did the Port suffer from disruption of cargo handling operations during British times.

However, certain economic forces at work during the interwar years altered that position of Port's total reliance on immigrant dock workers. The penetration of commercial ideas among the Sri Lankan rural population widened their economic horizon and, together with the growing landlessness in the rural areas rid them of their apathy for paid labour. Although government launched a programme of peasant settlements in the Dry zone since the thirties to solve the problem of landlessness in the Wet Zone, it was a failure at the initial phase. The problem, therefore, was to find employment for indigenous landless and unemployed persons within their reach. The improved wages and the better conditions of urban workers resulting from industrial legislation, was an added incentive for their search of urban employment. But the immediate cause for rural inhabitants to seek urban employment was the effect of the world-wide depression of the early thirties. The sharp fall in the export prices of primary products made severe cuts on plantation expenditure inevitable. Most of the rubber and coconut lands in the districts of the Western Province employing Sri Lankan labour in large numbers were compelled to declare many workers redundant. As a short-term solution to the growing joblessness among the local population, the government, ventured upon a policy of giving preference to Sri Lankans in the case of new recruits. Consequently, from the thirties employers of labour were required to fill 25% of the vacancies that occur in the labour grades from among the Sri Lankans (Dharmasena, 1985, 111-112).13 It was this policy, for example, which saw the employment as many as 300 Sri Lankans in the construction of Colombo's Inner Graving Dock in the mid thirties (CPC 1935).14 At the time of independence in 1948, nearly 2000 of the Port's stevedoring labour force of 6,447 were Sri Lankans. (see Taable 2.7) Thereafter, with the imposition of immigration control the transition to indigenous labour was more or less complete. By 1957 the proportion of Sri Lankan dock workers in the total

labour force had increased to 80 % whereas in 1948 it was not more than 33% (CPC 1948, 1957).¹⁵

Table 2.7

Total Number of Sri Lankan and Immigrant Labour, Port of Colombo,
1948-1957

YEAR	TOTAL LABOUR FORCE	SRI LANKANS	IMMIGRANTS
1948	6,477	1,979	4,498
1949	7,578	3,831	3,747
1950	8,404	5,050	3,354
1951	8,903	5,620	3,283
1952	9,666	6,433	3,233
1953	9,883	6,772	3,111
1954	10,077	7,311	2,766
1955	9,954	7,405	2,549
1956	9,806	7,596	2,210
1957	10,335	8,224	2,111

(Source: A.R. CPC)

The displacement of immigrants by Sri Lankans in the Port's labour force was not merely a change in the nationality of dock labour. In the wake of it were other developments which created a watershed in the Port's history vis-a-vis labour relations and port efficiency. In the first place, the type of local labour in dock employment was quite a contrast to the immigrants they displaced and had an impact on labour productivity in several ways.

As mentioned in the introductory chapter the superior physical strength of immigrants together with the conditions of dock labour was fundamentally responsible for the maintenance of a high level of port efficiency in the past. The local dock workers who replaced them, unfortunately, lacked the stamina required for dock work which was strenuous. In this regard the observations of the Millbourne-Christofelsz Commission of 1951 on the Handling of Ships in the Port of Colombo have great relevance and which are reproduced below are self explanatory.

"The facilities within the Port for handling cargo have not changed very materially since 1939, except in one very important respect, which we feel has had a marked effect on its ability not only to maintain pre-war standards, but to deal with the additional demands which have been made upon it. We refer to the type of labour employed in the Port for undertaking stevedoring and the task of handling cargo on the quays and in the transitsheds. Prior to 1939, this labour consisted mainly of non-Ceylonese men who, to quote from a recent report, was "a magnificent force of Indian workers who appear to be capable of maintaining sustained efforts for considerable periods". During the last few years there has been a diminution in the proportion of this type of labour, due to governmental policy and they have been replaced by a labour force which their physique and stamina, are not comparable with their predecessors" (S.P. XXV of 1951).16

Quite apart from the local labour's relative weakness in muscular strength for heavy work there were also a number of other developments in the realm of dock labour which in someways affected Port operations from the late forties. One was the high degree of sophistication achieved in the world communication systems, which helped the arrival of a ship to be known well in advance. Unlike in the past there was, therefore, no need for employers of dock labour to maintain a pool of casual labour in the vicinity of the harbour. The majority of Sri Lankan dock workers, moreover, were certain to be resentful to leave their families, and live in rented

accommodation found in incongenial surroundings of the city. The improvements in the transport services, on the otherhand, made it convenient and cheaper for the local Port workers to commute to the place of work daily from their own homes around Colombo. Nevertheless, because of the working hours at the Port, which extended from 7 a.m. to 2 a.m. on the following morning, many a Port worker could not avail himself of the transport services to his benefit, particularly those who were working in the night shift. The lack of transport services at night coupled with the lack of rest rooms forced many night workers to labour for another eight hours for overtime pay and took the following day off without remuneration. Tally clerks appeared to be the worse off group of Port employees in this respect as they put in as much as eighteen hours each day. Obviously, uninterrupted work for such long hours was one of the causes that affected labour productivity.

There was also the problem of an apparent deficiency of labour that affected Port efficiency, that in no way was related to the tonnage of cargo to be handled. The actual situation at the Port in the post-war years however was not a deficiency of labour but an excess of labour in relation to the volume of cargo that the Port was called upon to handle. The volume of goods handled at Colombo (exclusive of coal and liquid fuel) that was 2,351,001 in 1948, increased slightly to 2,787,681 tons in 1952 and remained more or less at that level by 1957 (CPC).¹⁷ In contrast, the Port's labour force (see Table 2.7) had recorded an increase of 60% in the ten year up to 1957. The explanation, therefore, lies in the fact that the stevedoring companies, eleven in number (seven cargo and four coal) each in greater or lesser degree employing insufficient permanent labour. The deficiency of labour of that type, it was found, was met from the 'labour pool' controlled by the Port's Labour Manager while others had competent permanent labour idling, because none of their ships were available for work at the time. This had caused considerable wastage of manpower and seemed to be all the more unsatisfactory. In the first place, the Port's labour pool's men were far less efficient than its permanent labour force. On the otherhand, the casual labourers who formed the second line of reserve, had little interest in their work and no loyalty to their employers who were very seldom the same company. In the case of the labour from the 'port pool' there was the other disadvantages of being unqualified and showing little interest in their work, and had no loyalty to their immediate employers whom they intermittently served.

The various welfare services provided appeared to have been of poor standard and brought no satisfaction to workers, whether permanent or temporary. All workers received two main meals, when at work. Though, there was no uniformity in the number of meals supplied or in their quality which differed from employer to employer. The major feature was that meal-time was not synchronized among stevedore labourers the lighter men or shore labour whose duty roster differed. Those whose meal-interval had been concluded had to idle because of the immediate commencement of the meal-interval for stevedore labour. (S.P.XXV of 1951)¹⁸

Trade Unionism

Undoubtedly, such issues relating to dock labour had an impact on Port efficiency. But the most distressing feature at the Port in the post-war years was industrial chaos with the growth of trade unionism which adversely affected, practically all spheres of Port activity. Unlike the immigrants, the new generation of port employees had a permanent stake in dock employment. Apart from their political awareness, they were also conscious of their rights. That was reinforced by the maturation of urban trade union movement which gathered momentum from the twenties. Towards the end of the forties the Port workers were strongly unionised and the majority of

their unions came to be affiliated to national political parties. Consequently, a highly politicised work force, strongly unionised whose strength was reinforced by political patronage received from national political parties was able to launch a series of strikes to improve their terms and conditions of work. Also, to relieve themselves of what they considered to be exploitative practices of dock employers. Plagued by strikes, the reputation of the Port among the international shipping circles was so damaged that it became, a subject of reference for a number of Commissions of Inquiry, appointed to go into the affairs of the Port in the fifties.

The findings of these Commissions of Inquiry, some of which are quoted below speak eloquently of the pathetic situation at the Port resulting from labour unrest. Commenting on the subject the Gratiaen report of 1956 stated:

"Serious disorganisation brought to the brink of chaos by labour unrest and bad discipline. The labour situation is bad as ever it was. Until industrial relations in the Port have permanently been improved, the major problems cannot be solved".

The Lewis Report of 1957 went still further and commented that:

"The state of labour-employer relations was so bad in Colombo Port that advice on possible ways of bringing about improvement on cargo handling facilities and methods was premature at that stage. Labour-employer relations had to be put in order, before any good results could be expected. Other reasons for the lack of output were: political interference with port working; trade union rivalry as a result from this interference etc".

Declining Port Efficiency

The cumulative effect of continued industrial unrest according to another Commission Report was that shipping circles and general trade in all corners of the world, expressed despair and disgust at the pathetic daily tonnage output at the Port of Colombo. (Cargo Handling. The Hague, 1959, 3). 19 The output figures per ship per day spent prepared jointly by the Ministry of Nationalised Services and the Ceylon Association of Ships Agents (CASA) reproduced in Table 2.8) explain the dramatic fall in the tonnage output at the Port, especially in the years after 1954. Calculated on the basis of statistical data given in the table, the annual average output per ship per day spent in the Port had dropped in freight tons to 230 in 1956 from 374 in 1953.

Table 2.8

Colombo - Output figures per ship per day spent in Port (freight tons)

Year	Jan	Feb	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1953	430	445	242	303	396	407	396	347	373	402	380	365
1954	485	449	441	301	337	311	311	272	442	280	257	287
1955	314	306	348	233	206	245	404	389	328	214	226	203
1956	230	295	446	247	221	149	187	205	175	224	142	240
1957	272	378	329	295	224	215	275	354	350	294	263	86

(Source: ESCAFE Report on Port of Colombo, 1966, p. 48).

The declining port efficiency in this fashion severely affected almost all branches of Port's trades. Labour indiscipline along with low tonnage output that Colombo experienced towards the latter part of the 1950s tarnished the enviable position that it enjoyed for nearly half a century as a port of call for international shipping passing through the Suez-Canal. Inevitably, the branch of trade that was immediately affected by the deteriorating labour relations was bunkering as

that was a branch of shipping services that flourished in an environment with a high level of port efficiency.

In contrast to the steamers of the earlier era, the high speed oil burning vessels were able to by-pass intermediate ports such as Colombo without the need to refuel, unless efficient services were offered at competitive rates. The early signs of this trend in fact, were experienced in the steep drop in vessel calls at the Port for fuel bunkering in the late thirties. The neighbouring ports with relatively peaceful conditions and which had improved in their efficiency, obviously, became the beneficiaries of the labour situation that was described as chaotic at Colombo in the fifties. (Cargo Handling, The Hague, 1959. p.2)²⁰

As could be expected the biggest casualty of low daily tonnage output and slow turnaround of ships was Colombo's transhipment trade. As summed up by the ESCAPE Report of 1966 on the Port of Colombo, labour unrest, increased rates and Port congestion together with improved efficiency of Indian ports made Colombo's volume of transhipment cargo decrease abruptly to 18,008 freight tons in 1957 from the post-war record level of 86,093 freight tons in 1954 (ESCAP, 1966, 39).²¹

Port efficiency which is crucial for Sri Lanka's economic well being needs no exaggeration. It is to be reiterated that unlike most countries in the region, certain circumstances to had compelled port investments to be concentrated in the Port of Colombo. Consequently, even at the time of independence more than 90 % of the county's seaborne trade continued to pass through Colombo. Sri Lanka's share of the three main exports, tea, rubber and coconut products in the world market has been relatively small and enjoyed no monopoly position. There was also strong competition for these products and what became worse was that there were commodities for which the

demand is highly elastic due to the availability of substitutes. Above all, Sri Lanka's dependence on Conference Liners for the carriage of its seaborne trade had been another factor to be considered in the light of freight increases, port surcharges etc. For them time spent in a port was time lost and brought no income. Still worse was port delay on an economy that depended extremely on foreign vessels in the carriage of its import-export trade. In Sri Lanka's context, the validity of this statement, cannot be contested. It had been Sri Lanka's experience that among other things, a major determinant of the prices of its imports and export had been freight rates. This became more evident since the fifties when apart from levying discriminatory freight rates on Sri Lanka's exports and imports Conference Liners also claimed heavy demurrage on the Port of Colombo. The behavious of Shipping Conferences in the way they have been as well as the economic forces at work brought about a lack-lustre development in Sri Lanka's overseas trade in the years 1957 to 1977. These developments in combination began to affect the destiny of the Port so much that corrective measures to put the economy of Sri Lanka in the path to progress as well as to improve the efficiency of the Port of Colombo became matters for urgent attention.

Chapter III

Trade and Shipping, 1957-1977

The downward trend in the economy of Sri Lanka that set in by the mid fifties continued and the signs of recovery were seen only at the end of the seventies. Added to that was the reaction of Shipping Conferences against the declining portefficiency by way of using measures at their command which were also to the disadvantage of Sri Lanka's economic interests. These in combination with several other forces at work from the mid fifties had an adverse effect on foreign trade which was mirrored in the performance of the Port for nearly two decades. The situation being such the major thrust of the state policy was rather to seek ways and means of revitalising the economy and also of raising the level of Port efficiency to a reasonably satisfactory level than investing on Port improvements. The ebb and flow of trade and shipping at the Port on following these developments at the Port, on the otherhand, was such that there arose no immediate need to make port investments of any significant scale. There was, therefore, a virtual lull in Port development activities at Colombo until the late seventies when its trade and shipping began to pick up. In the discussion to follow the main thrust would hence be on the successes and failures of strategies pursued to boost up the economy with the primary objective of analysing their impact on the two principal spheres of operations, namely trade and shipping of the Port of Colombo.

Sri Lanka's over dependence on the three plantation crops whose prices were affected by the vagaries of the world market did not cease with independence. Similarly, the basic food requirements - rice, wheat flour, sugar etc. also continued to be met from imports, the prices of which in the world market in contrast to those of the former continued to appreciate. The

result was the declining value of exports and the escalation in the value of exports causing the foreign reserves to drop to very low levels which was the most crucial feature of the economy of Sri Lanka during the period under survey. The drain of foreign reserves was so alarming that it dropped to Rs. 350.0 million in 1964 from a figure as high as Rs. 1,275 million in 1956. Until the end of the sixties there was no significant improvement in the position, as for example, by 1970 it had risen marginally to Rs. 402.6 million after six years. With the rising prices of Sri Lanka's exports brought about by the world oil crisis the position of foreign assets turned for the better and by 1976 the figure more than doubled to Rs. 1,402 million from Rs. 498.1 million in 1971 and rose spectacularly to Rs. 5,573.3 million in 1977 (Central Bank of Ceylon).1 Nevertheless, the benefit of rising value of Sri Lanka's exports latterly was syphoned off by the greater increase in the value of imports. Consequently Sri Lanka's import capability during the period as a whole was not for much satisfaction as is evident from figures pertaining to end of year foreign reserves in SDR terms reproduced in Table 3.1. The possibilities of increasing the Port's import cargo therefore, were narrowed.

Table 3.1
End-of-Year Foreign Reserves 1955-1977.

YEAR	Import-Month	SDR Millions equivalent (a)
1956	230.8	9.1
1957	204.4	6.6
1958	176.1	5.9
1959	137.6	4.0
1960	96.2	2.7
1961	92.7	3.0
1962	85.5	2.5
1963	75.4	2.3
1964	64.1	1.9
	85.7	2.6
1966	59.2	1.7
1967	85.5	2.5

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YEAR	Import-Month	SDR Millions equivalent (a)
	ngnts - 1957-1977 (in Ks	Balance of Pays
1968	70.1	2.1
1969	55.1	1.5
1970	61.7	1.9
1972	100.3	3.7
1973	119.0	3.6
1974	92.6	2.2
1975	92.4	1.9
1976	136.9	3.1
1977	294.8	10.6

Source: (a) Estimated by dividing end - of - year reserves by the average monthly import requirements during the year. Macroeconomic Policies, Crisis, and Growth in Sri Lanka, 1969-90 by Premachandra Atukorala and Sisira Jayasuriya, World Bank, 1994, Washington D.C. p. 145).

The growing balance of payments deficits resulting from the rise in the value of imports and decline in value of exports (except in the year 1976 and 1977) as shown in Table 3.2, however, was the most distressing feature of Sri Lanka's economy during the greater part of this period. By 1975 the deficit reached the all time high level of Rs. 1318 million and the recovery was seen only in the following year by a surplus of Rs. 170 million. The upswing in the value of exports, therefore, was of little benefit to Sri Lanka, because of the greater rise in the value of imports due to the effect of global inflation. It is against this backdrop of events that successive governments since 1956 adopted strategies to raise the volume of exports on the one hand, so as to increase the total value of exports and, on the other, to reduce the volume of imports with the primary purpose of bringing down the total value of imports. As these policy decisions were to exert a considerable impact on the behaviour of the Port's import-export trade the successes and failures of the strategies adopted calls for a brief analysis.

Table 3.2

Balance of Payments - 1957-1977 (in Rs. million)

YEAR	Value of Exports (F.o.B)	Value of	Trade
	Exports (F.o.b)	Imports (C.I.F.)	Balance
1957	1,669	1,764	-95
1958	1,624	1,713	-89
1959	1,773	1,958	-185
1960	1,796	2,006	-210
1961	1,707	1,794	-87
1962	1,763	1,906	-143
1963	1,708	1,869	-161
1964	1,767	1,960	-193
1965	1,909	1,922	-13
1966	1,674	2,018	-344
1967	1,650	1,985	-335
1968	1,976	2,356	-380
1969	1,909	2,655	-746
1970	2,016	2,332	-316
1971	1,931	2,218	-287
1972	1,898	2,153	-255
1973	2,346	2,644	-298
1974	3,376	4,603	-1227
1975	3,933	5,251	-1318
1976	4,815	4,645	+170
1977	6,638	6,007	+631

(Source: Central Bank of Sri Lanka-Annuals)

Export Sector

The plantation sector's main problem to increase production was that the area under principal crops in terms of feasibility of soil and climatic conditions had reached the optimum level as far back as the thirties. In such a situation the raising of the value of agricultural exports, obviously had to

be achieved not so much by a frontier expansion of the plantation industry, viz. extensive cultivation, but rather through vertical expansion which necessarily meant increasing the yields. With that as the aim several steps were taken since the early fifties, and the fundamental instruments through which the target to be reached was clearly spelt out in the Ten Year Plan of the National Planning Council covering the period 1959 to 1968. In respect of the principal crops tea, rubber and coconut the primary objective of the plan was to increase the total value (at constant 1957 prices) of the output of these crops by 32 per cent between 1957 and 1968 through replanting and rehabilitation. The replanting of tea and rubber acreages was thus expected to yield better results. The output of coconut, it was found, however, was affected by senility and, hence, the plausible solution appeared to be to increase output by replanting with good quality seedlings. Here again the yield per acre was expected to average at 3000 nuts as against the prevailing average yield of 2152 nuts. In the case of tea and coconuts further increased in yield was also expected through continued fertiliser use. The plan also envisaged the improvement of small holdings by way of rehabilitation.

The details regarding the programme of replanting of tea estates and the rehabilitation of small holdings which was to commence in 1959 were comprehensively dealt with in the Agricultural Plan of the Ministry of Food and Agriculture put out in the same year. The average cost of replanting an acre of tea was estimated at around Rs. 4000 of which the government was to offer as a subsidy to the estates in the form of a grant of Rs. 2500 per acre, free of income tax. The grant was to be given in instalments and the right to three final annual instalments was determined on condition that manuring and maintenance were satisfactory. Taking factors such as loss of income, intercropping and lack of technical skills into consideration, small holdings, instead of replanting were to be rehabilitated. Therefore, the small-holders were made eligible

for a subsidy of Rs. 650 per acre (also in instalments) to cover such operations as the supplying of vacancies, soil conservation and the application of fertiliser.

In the case of rubber, the replanting scheme was in operation since 1953. Under this scheme financial grants were offered for the replanting of uneconomic rubber lands in the following manner.

- (i) Rs. 700 per acre replanted for estates of 100 acres and above:
- (ii) Rs. 900 per acre replanted for estates between 10 and 100 acres; and
- (iii) Rs. 1000 per acre replanted for small-holdings under 10 acres in extent.

As in the case of tea here too subsidies were to be given in instalments. Moreover, an inspection by a competent Estate Superintendent was to precede the payment of each instalment.

The programme for coconut comprised:

- (i) A fertiliser scheme launched in 1956, under which owners of coconut lands over 20 acres received a subsidy of one third the cost of fertiliser used whilst smallholders having 20 acres or less received a subsidy of half the cost; and
- (ii) A scheme to assist the replanting of superannuated acres through subsidising the cost of planting materials and of fencing. Seedlings costing Re. 1 from nurseries were supplied by government at 35 cts. In the case of fencing the coconut lands, it was also proposed to give a subsidy of one rupee for each fence post used for replanting by estates over 20 acres and Rs 1.30 on each post used by small-holdings under 20 acres. For barbed wire a subsidy of Rs. 50 per acre was proposed for both estates and small-holdings.

Despite these incentives extended under the Agricultural Plan as well as those that followed, the performance of the plantation sector particularly the two most important crops tea and rubber, was not up to expectations after 1957. The area under tea, for example, which was 229,866 hectares in 1959 was expected to drop to 227,842 hectares at the end of planned period. But by 1968, according to available data, it had increased to 241,405 hectares and remained more or less at the same level until the mid 1970s.

Replanting, the most important aspect of the Plan on the other hand fell far short of the projected target. Although it was anticipated that by 1968 an extent of 27,114 hectares could be replanted, the actual extent replanted was 10,897 hectares. It was only by 1974 that the tea sector almost reached the target level by replanting 25,730 hectares. In terms of the acreage under cultivation and the extent to be replanted, rubber sector's performance record was relatively unimpressive. As per Plan the area under rubber by 1968 was to be 245,244 hectares as against 263,456 hectares in 1959. But by 1968 the land under rubber had come down to 230,354 hectares and had declined further to 228,034 hectares by 1974. Similar were the achievements in replanting rubber. Contrary to an anticipated replanted area of 142,452 hectares in 1968, the actual extent of land replanted with rubber by then was 106,856 hectares and, it was only by 1974 that with a replanted area of 127,712 hectares that the targeted figure for 1968 was reached.

As far as the Port of Colombo, the main outlet of Sri Lanka's exports was concerned the disappointing feature was the fluctuations in the volume of export of the three plantation crops resulting from the low level of production. The unsatisfactory state of the tea industry, especially, in terms of export volume and value during the period under review could well be seen from the data given in Table 3.3. The five year averages from 1957 to 1977 show that volumewise tea exports

had fluctuated between 181.2 and 208.6 million kg. The position was more or less the same with regard to the value of exports upto 1971 as the average value for the five year periods fluctuated between Rs. 1085.6 million and Rs. 1121.7 million. However, the most distressing feature was that in the years after 1971 though the value of tea exports rising remarkably with the rise in the f.o.b. price of the commodity, the industry could not reap its full benefit because of the failure of measures taken so far to increase production. For example, when in 1977 the value of tea exports reached the highest ever record level of Rs. 3,502 million, the volume of exports had dropped to 185 million kg. from an annual average of nearly 200 million kg. in the preceding five years.

Table 3.3

Tea Exports, Volume and Value - 1957-1977

(Quinquennial Averages)

Period	Export Volume	Value in Rs. MN.
	in MN kgs	KS. IVIIV.
1957-1961	181.2	1,085.6
1962-1966	208.6	1,032.0
1967-1971	204.7	1,121.7
1972-1976	199.2	1,562.6
1977	185.0	3,502.0

(Source: Central Bank of Sri Lanka, Annual Reports)

The tragedy of the tea industry during this period was partly due to the operation of certain forces outside the control of Sri Lanka and partly due to factors operating in the country itself. In the first place, f.o.b. prices of tea had fallen for long periods during the twenty years preceding 1976. An F.A.O document, study revealed that in the decade 1961-63 to 1971-73 when the indices of the unit values of all agricultural exports and of

manufactured goods increased respectively by 38 and 36 per cent, the average unit value of tea exports' declined by 22 per cent in terms of current dollars, from US \$ 113 to Us \$ 88 per ton or 40 percent in real terms. Secondly, even where prices or foreign exchange earnings increased in producing countries' own currencies, their hard currency equivalent fell or increased at a slower rate. Sri Lanka, tea export rupee values increased throughout the period 1971-75, but earnings in terms of SDR's fell from 1971 to 73 and increased less sharply than rupee earnings from 1973 to 75. Thirdly, even where prices expressed in hard currency increased, they did not rise as fast as the price of imports. Fourthly, exporting countries considered f.o.b. prices to be too small a percentage of the price to the consumer. Fifth, per capita consumption had been falling in the U.K. the largest market, from 4.14 kg per head in 1964-66 to 3.64 kg per head in 1971-73. Finally tea, as a beverage had performed worse than other beverages. The decline in per capita and, in some important cases, total tea consumption in high income market economy countries had been associated with increased consumption of other beverages, notably coffee and soft drinks (Jayawickrama, 1976 63-64).2

Table 3.4

YEAR	Tea Production (in MT. Tons)
1965	228,236
1966	222,312
1967	220,742
1968	224,803
1969	219,639
1970	212,210
1971	217,773
1972	213,475
1973	211,271
1974	204,038
1975	213,702

(Source: Central Bank of Ceylon)

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One of the impediments to increase production, as stated earlier, was the limits to horizontal expansion of the industry, and, hence efforts were taken in the direction of vertical expansion based on sound agricultural practices. This has yielded excellent results initially by way of yield increase. In 1965 228,236 MT of tea were produced from a cultivated area of 240,508 hectares whereas in 1939, 224,400 hectares of tea lands produced only 107,532 kg. Thereafter, rather than an increase the output of tea declined gradually and (Table 3.4) and dropped to 204,038 MT by 1974.

Among the reasons for the decline in productivity the most potent ones, being adverse weather conditions and an unscientific system of taxation which left the producer little or nothing to plough back to the land (Perera, 1976, pp 93-94).³ The Annual Report of the Central Bank of Ceylon for 1974 put the causes for the decline in the productivity in more straight forward terms as follows:

" The factors that contributed to the decline in productivity recently needs to be carefully studied and reviewed in the shortest possible time. Although it is difficult at this stage to clearly determine all these factors some of these are quite obvious. What is even more significant is that the major factors that have affected the fall in productivity have been strictly outside the purview of the industry and the industry itself has been relatively helpless. Since the early seventies a climate of considerable uncertainty has prevailed in the plantation sector with threats of nationalisation and to add to this, commodity prices have also been in a depressed state. As a result, there has been an element of neglect in most plantation properties because of the level of investment to maintain these properties in good condition has declined. When prices rose in 1974, the industries were not in a position to step up production very sharply in

order to maximise the benefits from the boom. In the light of this, the implementation of the land reform programme over a short period of time of two years has had for the first time most adverse repercussions from the point of view of export earnings" (Central Bank of Ceylon, 1974, p. 17).⁴

The observations of the Central Bank were equally true of the other two agricultural exports, rubber and coconut products. According to the production figures for rubber given in Table 3.4 the industry reached a peak in 1970 with the export of 159 million kg. A decline was seen thereafter despite the increase in the yield per hectare. By 1974, the volume of export had been at a lower level than at any time since 1966. It can also be seen that the area under rubber cultivation as well as that had reached maturity for tapping had stagnated rather than an expansion. Adverse weather conditions too had its share in hampering tapping operations and hence latex intake was low. Besides, in the early seventies high priced fertilizer had led to a further reduction in the application of fertilizer (Central Bank of Ceylon 1974, p 274).⁵

Like in the case of tea, a combination of these causes, consequently prevented the commodity to reap the maximum benefit of rising world prices in the mid seventies. The annual export figures pertaining to the industry from 1957 to 1977 given in Table 3.5 when put into five year averages also elucidate the fact that the growth in the volume of exports until 1966 was unimpressive and the averages approximated to 95 million kg. In the next ten years, the five year averages (145.5 mn kgs and 143 mn kg respectively for 1967-1968 and 1972-1976) depicted a satisfactory performance of the industry but not sufficient enough to maximise fully the benefits of favourable prices prevailing in the world market.

Table 3.5

Rubber Exports, Volume and Value, 1957 - 1977.

YEAR	Volume (in MN kg)	Value (in Rs MN)	YEAR	Volume (in MN kg)	Value (in Rs MN)
			-		Carrie III II
1957	95	300	1968	149	330
1958	94	252	1969	143	431
1959	94	298	1970	161	440
1960	107	375	1971	129	307
1961	89	268	1972	130	265
1962	102	289	1973	161	592
1963	95	255	1974	128	738
1964	114	288	1975	161	653
1965	121	303	1976	137	889
1966	135	337	1977	137	931
1967	132	382			

(Source: Central Bank of Sri Lanka, Annual Reports)

In terms of volume of exports as well as in export earnings, the worst to suffer during this period was the coconut sector. Apart from those factors, as described above that affected the plantation sector as a whole during these years the very nature of the coconut sector itself was another reason for its declining share in the country's total exports. Unlike tea and rubber the coconut sector was dominated by small holders and hence the gravity of the effects of price falls on the application of fertiliser, maintenance and replanting was greater. According to the Report of the Agricultural Census of Sri Lanka in 1982, the percentage share of small holdings to the total extent under the crop which was 69 in 1946 declined marginally to 64 in 1962 but rose dramatically to 91 in 1973. Part of this sudden and spectacular shift to small holdings by 1973 had been a direct result of the coconut lands alienated for village expansion after the Land Reform Law of 1972 (Census of

Agriculture, 1982, p. 28).6 Since then, production too declined as regular attention for the application of fertilizer and maintenance had become unsatisfactory (Central Bank of Ceylon, 1974, p. 17).7 Above all coconut, unlike tea and rubber had been geared more to domestic consumption than for' export, a fact which could be proved by comparing the production of nuts and the nut equivalent export of major coconut products (desiccated, copra and coconut oil). In 1960, for example nut production amounted to 2,183 million of which the export of major coconut products in nut equivalent was 976 million. In the seventies, the coconut sector according to Table 3.6 was leaning more towards the domestic market than for exports. The statistics regarding the export of major coconut products which are set out in Table 3.7 also illustrative of this point as well as the fact that the industry could not reap the maximum benefit of improved prices in the world market in the seventies like in the case of the other two exports as referred to earlier.

Table 3.6

Production of Nuts and Export of Major Coconut Products
(Desiccated Coconut Oil and Copra) intern of nut equivalents,
1970-1977.

Production (in million nuts)	Export of Major Coconut Products (in million nuts) (nut equivalents)
2,510	880
2,610	1,019
2,963	1,258
1,935	422
2,031	468
2,398	845
2,330	803
1,821	280
	2,510 2,610 2,963 1,935 2,031 2,398 2,330

(Source: Central Bank of Sri Lanka, Annual Reports)

Table 3.7

Export of Coconut Products, Volume and Value 1960-1977
(Quinquennial Averages)

Period	Desiccated Coconuts (in kgs)	Coconut Oil (in MT)	Value of all Coconut Products Exported (in Rs MN)
1960-64	51,748,226	90,710	220.1
1965-69	53,828,714	70,229	241.9
1970-74	46,372,007	51,113	265.9
1975	59,307,295	57,472	396.9
1976	45,987,853	60,608	382.6
1977	30,399,889	99,108	334.7

(Source: Central Bank of Sri Lanka, Annual Reports)

The limited success achieved by measures taken to increase export earnings by means of raising the productivity of plantation crops thus led to supplement the effort with experiments in other strategies to achieve the ultimate objective of checking the drain on foreign exchange and that was done in twofold ways. The novel feature of setting up of import substitution industries was one of them.

The new government that came into power in 1956 in defining the country's industrial policy divided the industrial sector into three groups:

- (a) Basic industries such as iron and steel, cement, chemicals, fertiliser, salt mineral sands, sugar and alcohol and rayon were to be the exclusive preserve of the state;
- (b) Joint state private enterprise in textiles, tyres and tubes, acetic acid, vegetable oil, ceramics, glass, leather, plywood, agricultural implements etc; and

(c) Private Enterprise - bicycle tyres and bikes, motor car, assembly, bricks and tiles, biscuits, hardboard, pharmaceuticals and so on (Election Manifesto, MEP 1956).8

However, in practice the government showed a greater commitment for state involvement in industrial undertakings and, consequently, it enacted the State Industrial Corporations Act No. 49 of 1957. The Act gave the government the power to establish and carry on any industrial undertaking or take over and carry on any industrial undertaking previously carried on by any Corporation established under the Act No. 19 of 1955 (State Industrial Projects, Bulletin I, 1961).9 Following the enactment of that Act the existing Industrial Corporations set up earlier were dissolved and re-constituted in terms of the new Act. Since then further expansion of the public sector industries took place and in all seventeen state industrial corporations as per Table 3.8 were in existence by 1965 and except the Fertilizer and the Steel Corporations the rest were in the process of producing a variety of goods. By 1974 others such as the Sri Lanka Tobacco Corporation, State Distilleries Corporation, Ceylon Petroleum Corporation, Ceylon Ayurvedic Drugs Corporation, Ceylon Fisheries Corporation, State Printing Corporation, State Graphite Corporation, and the National Milk Board, were added to the list of what were officially known as State Industrial Corporations. Although the majority of industries so established failed to meet the domestic demand to an appreciable degree, they nevertheless had some effect on the volume of import cargo handled by the Port.

The change of government in 1965 saw a shift of industrial policy with a bias towards the private sector. Therefore, the introduction of several incentives including the relaxation of the moratorium on the remittance of dividends, interest and profits which had been imposed earlier due to balance of payments problems (Ministry of Planning and Economic

Table 3.8

State Industrial Corporations - 1965

Name of Corporation

- 1. Ceylon Cement Corporation
- 2. National Textile Corporation
- 3. Sri Lanka Sugar Corporation
- 4. Eastern Paper Mills Corporation
- 5. Paranthan Chemicals Corporation
- 6. Ceylon Oils and Fats Corporation
- 5. Paranthan Chemicals Corporation
- 7. Ceylon Ceramics Corporation
- 8. Ceylon Mineral Sands Corporation
- 9. Ceylon Leather Products Corporation
- 10. Ceylon Plywoods Corporation
- 11. National Small Industries Corporation
- 12. National Salt Corporation
- 13. Ceylon Fertilizer Corporation
- 14. Ceylon Steel Corporation
- 15. Ceylon State Hardware Corporation
- 16. Ceylon State Flour Milling Corporation
- 17. Ceylon Tyre Corporation

(Source: Central Bank of Ceylon, Annual Report 1966, Table 11 (B) 1, p 59)

Affairs, 1967).¹⁰ As a further measure to promote private sector industries, the government by the late sixties liberalised import of raw materials and machinery by introducing the Open General License Scheme and Foreign Exchange Entitlement Certificate Scheme (FEECs). Under these schemes imports were liberalised on the basis of quotas and licenses. The two schemes led to an import of raw materials on an enhanced scale and resulted in the reduction of under utilised capacities in certain industries. But in some respect, the schemes were counter productive. On the one hand, the free import policy led to an indiscriminate import of several inessential luxury items

resulting in a waste of foreign exchange. On the other hand, the policy created sales problems for some State Corporations like Hardware and Steel which had to compete with imported items. Despite these weaknesses, the new industrial policy helped add to the volume of Port's import cargo.

The private sector bias industrial policy, however, was a short lived one as the socialist oriented United Front government formed in 1970 reversed the earlier policy and revived the more pronounced public sector involvement in industry that was in force between 1956 and 1965. The Five Year Plan (1972-1976) in elaborating the state industrial policy, declared among other things the need to create employment opportunities, the production of commodities for mass consumption, the need to minimise the foreign exchange commitment and raw materials and the need to gear industrial growth to export markets. The change of industrial policy, became more marked when steps were taken to break the monopoly of private industrialists. The takeover of the British Ceylon Corporation, United Motors, Wellawatta Weaving and Spinning Mills, J.B. Textiles and the vesting of the importation of Beedi Wrapper Leaf with Tobacco Industries Corporation and the establishment of the Jute Corporation, passing of the Mines and Minerals Law in 1973 in the final analysis were all directed towards the same objective (The Five Year Plan, 1972, 59-60, Indrapalan, 1975 - 35).11

The industrial policy since 1957 as a way of import substitution had no consistency in comparison with the export sector which continuously followed strategies to increase the volume of exports. The emphasis on the industrial policy, stated above, fluctuated between state and private enterprise which in turn affected the desired objective of rapid increase in industrial production. In the seventies with the aggravating balance of payments problem Sri Lanka moved towards an inward looking economic policy which was pursued primarily

through severe import restrictions. This policy obviously had a signal effect in reducing the volume of industrial imports which in turn as will be shown later had a bearing on port development activities. Other than reducing the volume of industrial imports and thereby creating scarcity of consumer goods the restrictive import policy of the seventies on the whole had very little impact in reducing the value of imports to an appreciable level because of the rising prices of imports.

The most plausible answer to the deteriorating balance of payments problem, brought about by the escalation in the value of imports was found to be in lowering the import bill in the category of food and drinks which bulked the imports. Within the category of food it was rice imports which contributed very largely to the value of imports and hence the wisdom to pursue a policy of increasing the domestic production of rice. Such aspect of agrarian policy gathered added weightage from the late fifties due to a variety of other causes. One was Sri Lanka's commitment to a continuing policy of providing extensive welfare services to all irrespective of income. From an economic point of view these welfare services were offered without any effort on the part of the recepient, but virtually thrust on them by political benevolence. (Karunatilake 1975, 20)12 The subsidy on rice being the largest item of welfare expenditure created the greatest problem for the budgetary policy.

The progressively increasing budget deficits since 1956 could be largely attributed to this factor. The total expenditure on welfare services, the cost on the rice subsidy and welfare expenditure as a percentage of the budget deficit, as worked out by Karunatilake, and which are put together in Table 3.9 clearly explain the gravity of the rice subsidy on Sri Lanka's economy from 1952 to 1974. Factors such as these too strengthened the rationality of increasing domestic production of paddy with the ultimate aim of attaining self sufficiency in the staple food of the people.

Table 3.9
Welfare Expenditure and the Budget Deficit 1952-1974.

YEAR	Total Welfare Expenditure	Expenditure on rice subsidy	Deficit as a percentage of welfare expenditure
	(in Rs. MN)	(in Rs. MN)	
1952	381,7	199.2	72.4
1953	275.9	85.6	about Wilien to
1954	208.8	10.7	Aw signed 120
1955	262.4	33.5	ke in 1982 an
1956	325.1	71.9	12.3
1957	368.0	103.3	61.9
1958	417.2	109.6	59.7
1959	511.4	143.4	87.2
1960	598.6	187.0	81.6
1961	651.2	246.0	76.8
1962	651.3	228.6	76.9
1963	666.3	231.7	65.9
1964	826.3	367.3	62.8
1965	736.4	264.4	70.6
1966	756.2	275.3	90.2
1967	702.1	195.6	102.9
1968	858.2	285.0	113.3
1969	926.2	305.5	106.5
1970	1015.6	307.5	113.3
1971	1245.9	524.4	106.5
1972	1565.2	598.7	109.0
1973	1395.6	570.4	104.2
1974	1644.5	776.3	120.5

(Source: Karunatilake, H.N.S., in Central Bank of Ceylon Staff Studies, Vol. 5, No. 1, April 1975, p.20.)

Thus in contrast to the measures taken to promote export agriculture the strategies followed for developing domestic agriculture gave equal emphasis on expanding the area under cultivation as well as of increasing the yield. In the provision

of financial incentives, the most important had been, the increase in the guaranteed price of paddy which rose to Rs. 14 per bushel (bushel = 20.87 kg) in 1958 from Rs. 12 per bushel in 1956 to Rs. 18 per bushel in 1964 and to Rs. 33 per bushel by 1974 (Central Bank of Ceylon).13 At the same time the area under paddy as is quite evident from Table 3.10 also saw a rapid increase, especially from the mid sixties. More remarkable was the increase in the yield per hectare which was directly a result of incentives provided by the government about which reference was made earlier. The yield of paddy per hectare which was 1862 kg in 1961 moved slightly to 1953 kg in 1962 and moved further upto 2,594 kg by 1969 and remained more or less at the same level until 1977 (Census and Statistics Department).14 The expansion in the area under paddy together with the increase in yield of paddy were productive of better results when the volume of rice imports began to decline significantly. (See Table 3.11)

It could be expected that rice imports which dropped to 21% of the total rice requirements of the country in 1974 from 53% in 1957 would have reflected in the volume of dry cargo imports at the Port of Colombo. However, in reality it was not the case except when in the seventies the restrictive import policy brought about a slight decline in rice imports.

The reason being that Sri Lanka moving closer to self sufficiency in rice did not in any way change its position in terms of food security. The imports of food items like wheat, wheat flour, and sugar continued to grow over the years. The import of wheat flour which totalled upto 167,000 MT in 1960 rose dramatically to 513,000 MT by 1967 and after a decline to 408,000 MT in 1974 began to rise again and reached 545,000 MT by 1977. The growth in the import of wheat, was more dramatic than wheat flour as it increased from 250 MT in 1960 to 17,391 MT in 1967, to 44,261 MT in 1971 and more than doubled to 119,926 MT in 1977. The import of sugar although

was not comparable with that of the former but saw a steady growth from the early sixties to the early seventies. In 1960, sugar imports at Colombo that was 164,000 MT went up to 308,000 MT in 1967, but since then a decline was seen as by 1976 it had dropped to 44,000 MT (Annual Trade Statistics, 1979).¹⁵

Table 3.10

Area under Paddy Cultivation, 1957-1977 (in 000 ha)

YEAR	Area under Paddy
1957	547
1958	628
1959	513
1960	666
1961	667
1962	696
1963	708
1964	719
1965	660
1966	733
1967	743
1968	790
1969	692
1970	759
1971	727
1972	727
1973	725
1974	826
1975	696
1976	724
1977	828

(Source: Central Bank of Sri Lanka Annual Reports.)

A closer examination of the strategies followed in the period 1957 to 1977 to make the economy move in the path of growth had little or no effect on the flow of cargo at the Port of Colombo. There had rather been a stagnation in the volume of dry cargo handled by the Port during the period under survey (see Table 3.12) except in the years 1965 to 1970 when an upward turn was taking place in consequent to the change in the trade policy. As far as the Port was concerned this, however, was a short term prosperity as the situation began to change soon, the causes for which were dealt with in brief in the preceeding discussion.

Table 3.11
Rice Production and Imports 1957-1977

YEAR	Local Production	Quantity Exports	Value of Imports	Rice Import as a % of Total
	(in 000 MT)	(in 000 MT)	(in Rs MN)	Requirements
1957	730	523	255	53
1958	855	482	238	47
1959	851	583	283	52
1960	1,005	528	242	45
1961	1,008	469	217	42
1962	1,123	410	195	37
1963	1,147	403	192	36
1964	1,180	658	326	47
1965	846	280	144	34
1966	1,069	693	367	51
1967	1,283	355	211	30
1968	1,509	370	341	28
1969	1.538	309	257	24
1970	1,795	480	318	30
1971	1,554	295	195	23
1972	1,469	299	161	24
1973	1,469	340	270	27
1974	1,793	298	720	21
1975	1,164	465	1,062	1161
1976	1,252	378	602	THE PERSON NAMED
1977	1,677	538	917	weeds althour

(Source: Central Bank of Sri Lanka; Sri Lanka Customs)

Port Efficiency

In a situation where the volume of dry cargo handled remaining almost at the same level, it is rational to expect that congestion and inefficiency in cargo handling operations would have been rare occurences in the sixties and the seventies. The validity of this argument is reinforced by the fact that the number of Port employees, the large proportion of whom constituted the Port's labour force had nearly doubled between 1957 and 1977 to handle a relatively lesser volume of cargo. The Port employees that aggregated to 10,338 in 1957 rose to 15,308 in 1958, to 22,412 in 1960 and decline to 17,077 in 1968. But the number shot up again to 23,000 in 1975 and slightly declined to 21,667 in 1977 (P(c) C, SLPA). The growth of the labour force in this fashion to handle relatively a lesser volume of cargo would have in effect meant less strain on the existing cargo handling facilities.

Contrary to these expectations the Port of Colombo in the greater part of the sixties proved to be a great disappointment. For congestion, labour unrest etc. that frequently disturbed Port operations before began to aggravate by the sixties to the point of bringing serious repercussions on the national economy. The congestion at the Port during these years, it was alleged, was not due to a deficiency in Port facilities in relation to the volume of cargo to be handled but was much due to the under utilisation of existing facilities. This in fact was one among several factors attributed to the pathetic state of the Port of Colombo by a Netherlands team of port experts in their report submitted to the government in 1959 about which some reference was made earlier. The report dealt comprehensively with the root causes for the ills of the Port and recommended possible remedial action to be taken towards their solution.

Table 3.12

Volume of Dry Cargo Handled, Port of Colombo, 1957-1977
(in 000 MT)

YEAR	Total Volume of Dry Cargo handled	Imports	% Share of Imports	Exports	% Share of Exports
1957	2,832	2,113	74	719	26
1958	2,538	1,860	74	652	26
1959	2,869	2,312	80	557	20
1960	2,845	2,296	80	549	20
1961	2,501	1,998	80	512	20
1962	2,692	2,175	80	516	20
1963	2,451	1,972	80	479	20
1964	2,771	2,148	77	622	23
1965	2,921	2,231	70	690	30
1966	2,921	2,231	76	690	24
1967	3,378	2,678	80	700	20
1968	3,123	2,236	72	745	28
1969	3,056	2,354	77	769	23
1970	2,813	2,046	73	766	27
1971	2,718	1,865	69	853	31
1972	2,405	1,559	65	905	35
1973	2,389	1,511	63	878	36
1974	2,359	1,501	64	858	36
1975	2,317	1,384	60	933	40
1976	2,387	1,383	58	597	42
1977	2,858	1,841	64	1,017	36

(Sources: CPC Port (Cargo) Corporation)

It was pointed out that QEQ had a spacious wharf measuring 2800 linear feet, capable of accommodating five fair sized ocean going vessels. The wide apron, offering room for double railway tracks, also with a portal crane track, provided ample space for satisfactory cargo traffic movements to and

from four modern transit-sheds. The sheds offered transit space for at least 9000 tons of mixed cargo for local consignees. The area in between sheds, on the other hand, provided sufficient open yard space for structural iron, pipes, cars, machinery etc. But, unfortunately the report states that the work at the QEQ was slow and listless and several labourers were found loitering due to a lack of supervision. In consequence, cargo remained unduly on quay-apron, other goods were transported slowly from ship's hook to shed or were kept until some corporation vehicle or a consignee's vehicle eventually moved them out. Thus, valuable shed space, it was pointed out, was under utilised and, besides, four available modern 6 ton portal cranes were left unused. Elaborating further the report mentions that similar was the use of the Delft Quay. With four large transitsheds in the projecting jetty with adjacent wharves measuring approximately 2800 linear feet, the Delft Quay also had four modern 6 ton electric portal cranes. Yet in one respect, it seemed that this Quay differed from the QEQ because of the fact that the western side of the jetties, capable of accommodating two fair sized vessels was reserved for "food ships", whilst the two sheds on the same side had been assigned to purposes other than the transit storage originally meant to serve discharging of vessels. Moreover, since the shed No. 1 of that had been assigned exclusively to the Food Commissioner's Department, it was rarely been utilised by other consignees. The shed No. 2, on the other hand was set apart as a "repository warehouse" for the QEQ, The non-availability of a permanent repository warehouse on the otherhand, deprived the Delft Quay of two valuable transit sheds. Besides, the "food ships" alongside the western quay were in the practice of discharging their bag-cargoes mainly by way of "crash-landing", which meant that ships' hooks delivered their slings directly on to open trucks of the Food Department. Although, this type of unconventional method worked fairly efficiently it, nevertheless, depended on ample and well regulated supply of trucks which was not the case at times. On the whole, the

report observed that the work done at the Delft Quay appeared to be of low standard as at the QEQ.

Finally, the situation at the Prince Vijaya Quay, the so called "mechanised quay", which offered berths for two fairly sized vessels alongside a modern quay of about 1000 linear feet. The wide quay apron was equipped with a crane-track with four 6 ton electrical portal cranes, and a triple railway track. Also, were two modern transit-sheds, each capable of accommodating roughly 6500 tons. However, one of these sheds had been released to the Food Commissioner for exclusive use of the Food Department. Although named as the "mechanised quay", the work at Prince Vijaya Quay proved to be of very poor standard. The report adds that there was very little supervision, mechanical contrivances moved backward and forward in a confused manner, pallets and stillages were used inefficiently and cargo stacking efforts appeared to be unsatisfactory. What made worse was the turnover which indicated the lowest output per man at the Port as a whole.

There was in addition a large variety of commodities destined for Colombo which were bearing different numbers and marks. Such varieties of commodities proved to be unsuitable for mechanical handling. And, the dock workers the report states being unable to grasp the concept of mechanisation, found themselves completely incapable of performing anything even remotely resembling proper manipulation. The result was a daily tonnage turnover which indicated the lowest output per man at the Port as a whole.

The most rational step as suggested by the Corporation officials and endorsed by expert opinion to obviate these problems was to use the Prince Vijaya Quay exclusively for export cargoes. In their view, the bulk of Sri Lanka's exports being tea, rubber and fibre were considered to be best suited for mechanical handling. Dealing with the export trade itself it

was found that it was also a victim of the low standard of cargo handling operations at Colombo in general and, besides, was in a worse position than the import trade. The situation was so bad that shippers and shipowners constantly complained of harassing delays and repeated "shut out" of export cargoes. A survey of the allocation of berths and equipment for import and export cargoes conducted for two months in 1959 proved convincingly the relatively poor treatment that the latter received. During the two months a total of 272,000 tons of mixed import cargo was discharged using an average of 15 alongside berths together with 3 to 10 "stream" berths, about 148 lighters and roughly 900,000 square feet of storing space. Whereas, during the same period a total of 135,000 tons of export cargo were loaded using an average of only 2 alongside berths and 10 to 12 "stream" berths, about 119 lighters and some 70,000 square feet of storing space.

The single branch of Port's trades, the handling of which was least affected was the transhipment trade that held sway in the past. This as will be dealt with later was due to no other reason than the slowing down of the trade experienced from the mid fifties. The transhipment ware houses thus had sufficient temporary accommodation and the only deficiency in common with all branches of Port's trades was the insufficient supply of lighters. (Report on Cargo Handling, The Hague 1959).¹⁷

The labour unrest that menaced the Port since the mid fifties which was dealt with in detail in the preceding chapter continued into the seventies although the effects on the Port were less serious in the seventies than in the sixties. Consequently, in a large measure, labour unrest also contributed to the declining port efficiency during the years. The Port was not the only sector that was plagued by strikes. There were also other sectors such as the plantations which were affected by series of strikes during the years under review

Table 3.13

Man Days Lost by Strikeds in All Sectors 1958-196867 (B) Strikes 1958-1974

ıent	Man days lost	399,228	460,141	15,139	170,372	801,882	479,678	274.623	89,952	34,351	284,709	265,726	
Other Employment	Workers	42,713	42,453	4,830	38,013	25,730	29,819	21,409	10,085	4,592	14,883	11,308	
	No. of Strikes	96	71	37	39	50	58	103	55	32	36	20	
ilbru tadi	Man days lost	340,632	352,095	259,948	317,866	193,792	359,905	611,060	482,259	4,117,264	414,636	722,690	
riantations	Workers	39,372	47,318	42,528	29,223	42,569	62,511	600'89	70,929	138,259	74,968	606'59	
Liant	No. of Strikes	123	1771	123	06	138	174	201	175	132	194	171	
	Year	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	

(Source: Department of Labour, Sri Lanka)

and that in some way or other affected the Port operations. The details regarding strikes in the country as a whole for the years are given in Table 3.13. In terms of the man days lost the labour situation had become worse by the early sixties and some improvement was seen only after the mid sixties. Unfortunately, the Labour Department had not kept details regarding strikes at the Port separately but fragmentary evidence suggests that the labour relations there had been much more, precarious than elsewhere. The man days lost in all sectors of the economy in 1961 that was 170,372 rose to the record high level of 801,892 by 1964. Surprisingly the man days lost in the latter year was very largely accounted for by strikes in Dock, Port and related transport sectors that was 530,767 man days. That to some extent therefore explains the gravity of the problem of industrial unrest at the Port in the early sixties. (Central Bank of Ceylon).14 Besides, Sri Lanka as a whole continuing to form Colombo's hinterland the effects of the labour problem on the economy needs no explanation. As far as the Port was concerned cumulative effect of these developments was the drop in output per ship per day spent in the Port. In 1959 that which was 153 freight tons although rose to 281 freight tons in the following year began to decline thereafter and by 1964 dropped to the very low level of 156 freight tons. (ESCAFE Report 1966-48).18

The ultimate result of low tonnage output, congestion, labour unrest was the serious damage done to Colombo's enviable reputation for expeditious dispatch of vessels. That in turn together with import restrictions to a certain extent affected ship calls at the Port. According to port records ship visits in 1958 totalled upto 2675 but dropped to 2525 in the next year and declined further to 2,221 in 1964 (Ibid). The position regarding the bunkering trade remained the same as discussed in the earlier chapter and needs no further comments. Likewise the irreparable damage was done to transhipment trade. The tonnage of that trade which averaged at 4,070 per year in the

five years 1958-62 dropped to 3,158 in 1963 and declined to the lowest ever level of 1,158 by the following year (CPC, P(C)C).²⁰

However, the Port alone was not the sufferer from its loss of image as a fast Port. Much more serious had been its repercussions on the economy of Sri Lanka. It is an accepted fact that when Shipping Conferences are unable to absorb additional operational costs owing to delays caused by congestion at ports they usually resort to various methods to palm them on to ports they serve. In the absence of a national carrier, until the seventies Sri Lanka depended entirely on conference liners to carry its overseas trade and higher freight charges and discriminatory freight charges on Sri Lankan exports by them had been the main grievance of Sri Lankan export trade. The levy of discriminatory freight rates on the country's exports, in fact was not something new. Indeed, it had been a subject of a Commission of Inquiry in the early thirties. But the economic disadvantages of excessive freight rates became more evident during the sixties because of the slump in world prices for primary products. Since most Sri Lankan exports faced stiff competition in world markets, increased freight rates posed particularly a serious threat. For example, the long standing anomaly in freight rates on tea from India and Sri Lanka for example, widened during that decade. By 1966 the differential between Colombo and Calcutta was thirty-seven shillings per ton of forty cubic feet, whereas in the 1930s it was only seventeen shillings. Shipping conferences argued that this differential was accounted for by lower productivity, higher loading costs and smaller consignments of cargo at Colombo (Gunaratne, 1978, 116-117).21

Perhaps the most resented practice in the opinion of shippers and the one which brought disastrous effects on the economy was the increase in freight rates on Sri Lankan exports. Freight rate indices show that the overall freight index increased only slightly upto 1963 but quite sharply thereafter (See Table 3.14). By 1971 the index had risen approximately 60% since 1961. And the increases on some individual items were even greater; charges for the carriage of rubber and plumbago, for example, rose over 70% during this period. The escalation of freight rates had three major effects. In the first place, the higher rates eroded any gain in foreign exchange that would have accrued to the country from improvements in world commodity prices. Secondly, they added a further burden to the already deteriorating balance of payments, since freight charges were usually payable in foreign currency. Finally freight increases also had the adverse effect of escalating the prices of imports, which inevitably affected the standard of living of the mass of the population.

Table 3.14

Freight rate indices, Sri Lankan Exports, 1961-1971 (1961 = 100)

Period	Tea	Rubber	Coconut	Plumbago	Overall Index
1961	100.0	100.0	100.0	100.0	100.0
1962	101.4	103.9	101.1	102.8	101.6
1963	101.8	103.9	101.1	102.8	101.9
1964	110.7	115.1	106.2	114.8	111.2
1965	110.7	115.1	106.2	114.8	111.3
1966	115.1	121.1	114.9	119.4	115.9
1967	119.0	124.3	120.2	124.0	119.9
1968	138.9	147.1	134.5	148.9	140.5
1969	128.2	145.5	135.8	149.0	132.5
1970	141.3	162.2	138.5	160.5	145.5
1971	156.0	175.3	153.4	174.8	160.7

(Source: Central Bank of Ceylon)

Quite apart from freight rate hikes, surcharges on Colombo by Shipping Conferences were another result of delays to shipping at the Port in the greater part of this period. The following surcharges by the U.K and the Continent Conference, are thus illustrative of the delays to shipping at the Port in the late fifties and the early sixties.

Surcharge: 15% imposed November 1955

increased to 17 1/2% February 1957 reduced to 10% and 5% May 1957

removed June 1957.

Surcharge: 12 1/2% imposed February 1962

increased to 25% December 1963

increased to 50% March 1964

reduced to 40% July 1964

reduced to 30% October 1964 reduced to 20% January 1965 increased to 30% April 1965

reduced to 20% June 1965

reduced to 7 1/2% September 1965

removed November 1965 (ESCAFE, 1966-48)²²

Financial Performance

Because of the depressed state of trade and shipping and the heavy surcharges by shipping lines, the Port of Colombo, except in a few years became a financial liability to the General Treasury from the mid fifties. The state of the Port's financial record from then onwards could be gathered by way of a comparison with some years in the immediate past. From 1948/49 to 1951/52 (See Table 13.15) the Port was in a financially buoyant position enjoying revenue surpluses. But subsequently, upto 1953/54 there was, however, a slight drop in revenue. That was very largely a result of the industrial chaos created by the trade union action as a reaction against the removal of the subsidy on rice in 1953. Thereafter, the Port regained financial buoyancy which lasted until 1959/60, except of course, in the year 1957/58 when a drop in revenue was

experienced. The fall in the revenue in that year compared with the previous year was attributable to the disruption of economic activity in consequence of the communal riots which led to the declaration of a state of emergency in May 1958. The other reason was the decrease in that year of Port Dues and Harbour Dues, resulting from strikes and lock-outs (CPC 1957/58).23 Moreover, Port Dues and Harbour Dues, in that year for instance, had fallen by Rs. 273,590 and Rs. 807,882 respectively from those of the previous year. In the following year although there was an increase in the total Port revenue, there was nevertheless a drop in Port Dues and Pilotage Dues by Rs. 157,546 and Rs. 31,223 respectively due, inter alia, to a lesser number of vessels calling at the Port. But Harbour Dues and Warehouse Dues had risen by Rs. 873,260 and Rs. 1,192,531 respectively because of more imports and demurrage paid by consignees (Ibid).24 The drop in Port revenue became more marked during the year 1962/63 because of import restrictions and the diversion of ships to other regional ports in certain years. In addition revenue from oil facilities also fell owing to less shipments of oil. It is true that from 1963/64 to 1965/66 Port revenue appreciated again but it was very largely due to increases in Port Dues, Harbour Dues, Warehouse Rent and Pilotage dues accompanying the increases in the volume of imports and number of vessels calling at Colombo. It was from the late sixties onwards that the Port became financially in a sound position very largely due to the relative improvement in Port efficiency that was brought about by improvements in labour relations.

What is also evident from data on financial performance of the Port is that while its revenue fluctuated from 1948 onwards, the expenditure on the contrary had been on an upward trend except in the years 1954/55, 1958/59, 1959/60, 1961/62 and 1962/63 when it fell slightly. Even then that fall in expenditure was not sufficient enough to arrest the losses incurred by the Port in the years 1961/62 and 1962/63. To sum up on the basis

+ 6,138,143 + 7,206,322 - 3,740,655 + 3,740,062 + 9,049,839 - 4,208,966

+ 3,814,569 + 2,547,017 + 1,665,531

+5,291,822

+ 5,310,527 + 7,773,243

+ 1,963,781

- 1,570,808 - 3,818,670 - 2,168,446 - 3,544,466 - 2,550,140 - 4,831,762

+ 264,240

+ 39,565 + 2,541,982 +23,544,055

+ 40,695,167

Second se	Revenue & Expenditure-Port of Colombo 1948-1966	t of Colombo 1948-1966
	Revenue Rs.	Expenditure Rs.
	13,685,312	11,721,531
	17,483,910	12,173,383
	20,034,191	16,219,622
	866,692,61	17,222,981
	19,053,835	17,388,304
	21,716,316	16,424,494
	24,313,459	18,175,316
	25,286,671	18,080,349
	24,565,022	26,193,677
	26,811,603	23,071,541
	30,194,280	21,144,441
	26,607,669	30,816,635
	28,119,934	29,690,742
	25,495,888	29,314,558
	29,645,112	31,813,558
	29,112,459	32,656,925
	33,788,411	36,338,551
	33,777,105	38,608,867
	36,327,835	36,367,400
	41,035,328	38,493,346
	44,414,355	44,150,115
	52,023,000	24,202,993
	na ma	na
	na	na
	63.918.583	34,816,227
	59.205.021	35,660,966
	80,423,538	39,728,675
(Source: CPC)		

of the preceding analysis throughout the early 1960s, the financial record of the Port was a story of losses.

The explanation for the losses incurred during these years lies in the increasing expenditure in the categories; (a) personal emoluments; (b) cost of living allowance on salaries and wages; and (c) capital expenditure. The increases on items (a) and (b) had been a common occurrence since the late 1950s largely because of the growth in the labour force, despite the fact that there was a downward trend in the Port's merchandise trade. The employment of labour out of proportion to the demands of the Port's merchandise trade was further aggravated by a government decision in 1959 to reduce the normal working hours from 56 to 45 1/2 hours per week. Because of this decision those who worked beyond the stipulated hours received overtime pay and the overtime bill began to increase. It was revealed that by 1964 there had been a large difference between stipulated minimum wages and the actual average earnings. For the manual skilled and unskilled the actual monthly earnings had been 3 to 6 times as much as the minimum, and in some cases, for the special grades, had risen to 10 times. The study concluded that the higher level of actual earnings was occasioned partly by allowances and other cash add-ons and, more significantly, by overtime payments (Diandas, 1983-153).25 In the final analysis, the losses so incurred by the Port became a financial burden on the General Treasury, especially since the early sixties.

Improvements in Labour Relations

The declining Port efficiency and loss of revenue became matters of serious concern for the authorities to search for remedial action so as to maintain Colombo's historic roles as the nerve centre of the country's economy and the premier port of call in South Asia. In the search for remedial measures improvements in labour relations received the highest priority

as it apparently was the primarily the cause for most of the Port's problems. From the inception, private operators had been engaged in landing and stevedoring work of the Port and since independence there was strong agitation by trade unions to replace them by a government sponsored Cargo Corporation which received acceptance by the Gratiaen Commission of 1957 and the result was the establishment of the Port (Cargo) Corporation (P(c) C) which commenced functioning from August 1st 1958.

Although the establishment of the P(c)C was not immediately followed by an improvement in labour relations to an appreciable level in course of time an improvement however, did take place. That happened when the employees began to enjoy those rights and privileges that their counterparts in other public corporations, enjoyed and which were denied to them under private operators in the past. The stigma of being daily paid casual employees, for example, disappeared and, being a strongly unionised class of employees and also because of the fact that they were corporation employees, became beneficiaries of many welfare measures. Subsequently, medical care, housing, canteen facilities, free meals etc. were some of the more important benefits bestowed on them. The latter two seemed to have been the most noteworthy welfare activities that in a great measure helped to bring down the cost of living of Port employees. In 1958 five welfare canteens were in operation on a co-operative basis, managed by the workers themselves, catering to the daily needs of tea and snacks. Such canteens that numbered six by 1960 had increased to twelve by 1965 and while the profits were shared by the workers, the General Treasury supplied some of the expensive equipments such as refrigerators, electric cookers etc (CPC 1959, 1960, 1965).26 The most innovative step taken in this direction however, was the supply of free meals, lunch and light refreshments at night. The concession of the supply of free meals to all government labour in the Port was started during the last war in 1942. Later it became a permanent feature and according to Port authorities it had turned out to be one of the most important fringe benefits enjoyed by Port workers. In supplying these, the Port had to incur an expenditure of nearly one million rupees per annum in the early sixties which was exclusive of an average of Rs. 34,000 spent per year on the supply of teas and snacks for those working at night (Ibid). ²⁷

One of the reasons for the persistence of industrial unrest at the Port in the late fifties was the lack of an effective machinery to go into grievances and demands of workers. A meaningful step, therefore, was taken in 1959 by appointing an Employment Relations Officer to the CPC. With this appointment the position changed and it became possible to give unions and employees, who submitted any complaints or demands, an immediate hearing at which they were given ample opportunity to ventilate their grievances. It was also the duty of this officer to follow immediately with the relevant authorities, all matters requiring decisions and see that prompt replies were obtained. This arrangement seemed to have augured well for the Port as the unions came to realise that their complaints were being given full and serious consideration by the government and thereby averted many possible strikes. There is concrete evidence that since the innovation of this mechanism to handle labour disputes there had been a gradual decrease in the number of complaints and demands put forward by the unions. In 1959, for exmaple, as many as 1,353 complaints and demands were made and through the intervention of the Employment Officer 978 of them were looked into of which 612 were disposed of and 866 were under investigation. In the following year the number of complaints and demands dropped to 932 of which 562 were disposed of and 370 remained to be solved. More importantly, after many years the Port in that year enjoyed absolute industrial peace. From then onwards, although the Port was not free of strikes

better labour relations remained as disputes were satisfactorily solved through discussion (CPC 1958, 1959, 1962/63, TETT AVENUE 1965/66).28 MIE MALE THAT IN

Decongestion Measures

Apart from seeking solutions to the more serious problem of labour unrest the attention of Port authorities was also drawn to explore ways and means of relieving congestion at warehouses, quays etc. As an immediate and a pragmatic solution to the problem moves were made after 1957 to divert ships to Trincomalee and Galle and, whereby, each of the ports was entrusted with different roles to perform. The diversion of vessels to Galle, for instance, had been to discharge food cargoes to serve the needs of the Southern Province as a means of reducing congestion at warehouses and transit sheds at Colombo. It is on record that in 1958 and in 1959 nearly 30 percent and 20 percent respectively of vessels calling at that port carried food cargoes. The rest was to discharge cement and other essential imports and, also, for the shipments of exports such as coconut products and rubber from the same Province. Evidently, the number of vessels calling at these ports had been comparatively high during years of labour problems at Colombo. Port records show that in 1958 there were 127 callers at Galle as against 51 in the previous year. Besides, in the former year Galle had handled the largest ever shipping tonnage and also the largest revenue ever earned. By 1959 the number of vessels calling at that port rose to 171 and dropped to 138 in 1962 and to 36 in 1964 and further to 32 in 1965 (CPC).29 The decline may be indicative of the fact that it signalised improving labour relations as well as the fact that the diversion of vessels was a temporary measure.

The diversion of ships to Trincomalee during these years, was on a much more larger scale because of its relative proximity to the tea hinterland. Port records, show that in the

year 1958, 135 merchant ships used that port and the majority of them loaded tea, mainly for the United Kingdom, whilst a small number brought imports of general cargo. In the following year the number of vessels visiting that Port more than doubled to 314. The records, however, do not comment on the purposes for which such a large number of vessels used that port, but it could be presumed that the majority of these as in the past may have loaded tea from there. The later shipping records of the Port of Trincomalee which were comprehensive prove that presumption. In 1962, for example, 348 ships visited this port of which as many as 261 loaded tea, 60 discharged general cargo, 17 were food ships and 6 vessels called for bunkering only. The volume of tea loaded in that year at Trincomalee amounted to 311,616,052 lbs. Similarly, in 1964, 248 vessels used that port of which 174 loaded tea (Ibid).30

In times of serious crises in the Port the policy of diverting vessels to these ports was supplemented by using the services of armed forces to clear essential cargoes. One such occasion was in the month of June and July 1959 when there were a series of strikes involving large sectors of the employees of the P(c)C. During these strikes, the government in order to avoid the country of scarcities of essential food items used the armed forces to clear food imports (Ibid).³¹

Such measures aimed at reducing congestion at the Port of Colombo were supplemented with the provision of additional facilities and the acquisition of equipment. These, that entailed capital expenditure of considerable amounts which could hardly be borne by Sri Lanka passing through a serious financial crisis. Therefore, it was inevitable for the country to look for external sources of finance for port improvement purposes. Consequently, in the middle of 1959 the World Bank was approached for financial assistance for developing not only the Colombo Port but also the other major ports of the country

(Ibid).³² The team of Netherlands Engineering Consultants (NEDECO) that visited Sri Lanka in response to that request submitted a comprehensive report in 1961 on the subject of port operations, development of the Port of Colombo and some outports. The main focus of the NEDECO team was on Colombo and with regard to increasing its capacity the recommendations were:

- (a) To improve organisation, management of labour situation, cargo handling methods and training first;
- (b) To improve the handling of food cargo which was the largest item of import giving trouble. This required the cooperation of the Food Commissioner;
- (c) To improve and enlarge lighter jetties inside the harbour and make them of such a construction that mechanical equipment could be used and higher handling capacity be increased;
- (d) To increase the capacity of existing quays upto 140,000 tons per berth of 180 metres; and
- (e) To create new alongside berths for ocean-going ships if (a), (b), (c) and (d) were not sufficient. These new alongside berths were to be found by removing the Oil Dock to a site outside the harbour and transforming the former oil dock into a commercial dock.

The report also made useful analyses of estimated cost of port development at Colombo; total capacities before and after improvements; and a summary of needed and available cargo-handling equipment together with the cost involved. The total capacity before and after improvements were effected at the Port as per report is reproduced in table 3.16. What was more, for the first time the NEDECO report gave details of available and the required cargo handling equipment in the ten areas listed below as one of the means of enhancing the efficiency of port operations.

- 1. QEQ
- 2. Wharf Road
- 3. Delft Pier
- 4. Pettah Baghdad Area
- 5. Kochchikade Area
- 6. Coal Jetties
- 7. Prince Vijaya Quay
- 8. North Guide Pier
- 9. New Oil Harbour
- 10. Improved Oil Dock into Commercial Harbour.

The procurement of the equipment to achieve this objective was to be in two stages and the increase in each category had to be as follows:

- (1) Handcarts from 500 to 1330
- (2) Mobile Cranes from 20 to 40
- (3) 3 ton lorries from 18 to 262
- (4) 5 ton lorries from 0 to 15
- (5) 10 ton lorries from 0 to 4
- (6) 6 ton tractors from 11 to 46
- (7) Forklift trucks (diesel 2 ton) from 24 to 99
- (8) Pallets from 0 to 19,000
- (9) Pallet slings from 0 to 163
- (10) Forklift trucks 6-10 tons from 2 to 3
- (11) Battery driven platform trucks from 40 to 49

In considering the country's weak financial position as well as the state of the Port's income and expenditure in the early sixties the estimated expenditure in the implementation of these proposals seemed financially an unbearable task. That was indisputably so in view of the foreign currency component involved in both physical improvements and the purchase of equipment. For the development of the civil technical structures the local currency component was estimated at Rs. 22,530,000 whereas the foreign currency component was calculated to be Rs. 35,899,000. The expenditure involved in

Table 3.16

Total Capacity Before and After Improvements

TRANSIT SHED	as Total capacity 1 after extension	No. Surface Capacity No.Surface Capacity M2 Tons M2 Tons	1,770,000 31 105,000 84,000 45 179,000 144,000
	Capacity as at 1961	The State of the S	31 105,000 8
LIGHTER BERTHS	Improved Situation	Capacity Tons	1,770,000
		No. of Berths	118
	Position as at 1961	Capacity Tons	920,000
		No. of Berths	92
SHIP BERTHS	Improved	Capacity Tons	13 1/2 1,580,000 19 1/2 2,730,000
		No. of Berths	19 1/2
	Position as at 1961	No. of Capacity No. of Capacity Berths Tons Berths Tons	1,580,000
	Position at 1961	No. of Berths	13 1/2

(Source: Netherlands Engineering Consultant, The Hague)

the purchase of equipment was entirely in foreign currency the rupee conversion of which totalled to Rs. 12,640,000. The execution of the whole scheme as proposed in the NEDECO report was estimated to cost Rs. 71,080,000 inclusive of the anticipated foreign currency expenditure (NEDECO, 1961).³³

Fortunately, the Port Authorities for the time being were spared of executing the port development programme as the NEDECO itself cautioned that further capital investments were justified only when at the same time improvements in organisation, management, labour situation, cargo handling methods and training would guarantee that the existing and new technical facilities would be used efficiently and to full capacity (Ibid).34 In fact the government policy on this issue was also the same. The National Planning Council in 1959 declared that considering the projected expansion of importexport trade during the next five years that the existing capacity of the Port was sufficient if organisation, mechanisation and ship working were improved. Accordingly the National Planning Council was of the opinion that the strain on the Port, to any significant degree, was not due to lack of berths. Nor was it due, to inefficiency of the workforce though it was a contributory factor. To a very large extent the ill-functioning of the Port, it was alleged, was owing to bottlenecks in the flow of goods from the ship to the final consignee and vice-versa.

In tackling the Port problems the government had two strategies. The immediate tactical problem was to increase the efficiency of the Port in general but in the long run the policy was to reduce the economy's dependance on a single port. The reasons being that major technical breakdowns, strikes and weather conditions could easily disrupt the flow of goods through Colombo with considerable damage to the economy as a whole. Apparently, these were valid reasons for the greater use of Trincomalee towards the late fifties. Nevertheless, the major source of trouble then had been identified as the

inadequacy of warehouse facilities at Colombo which led ships themselves to perform this function at excessively high costs to the economy. The official thinking, therefore, was that if these problems were solved, the question of developing other ports was not urgent. Consequently, port development received low priority in the Ten Year Plan. In phasing out investment expenditure for ports and harbours - Colombo, Galle, Kankasanthurai, Trincomalee and fisheries harbours - for the period 1959-68, the allocation for Colombo was Rs. 112.2 million compared with Rs. 121.4 million for the fisheries harbours. The total allocation for all ports and harbours was Rs. 372.0 million (The Ten Year Plan, 1959 - 434-442).35

It was under these circumstances that the CPC identified the following three priority areas for necessary action as recommended by NEDECO.

- (1) Training of necessary skills;
- (2) Increasing the number of lighter landing, transit sheds, improving cargo handling equipment; and
- (3) Improving management and labour through the formation of one authority with a fair measure of autonomy in management, finance and labour policies.

However, immediate action was taken only on (1) and (2) above but not on the other which came within the jurisdiction of the P(c)C. The reason being that there was strong opposition from trade unions at that time of those belonging CPC for such a move as there would be the likelihood of employees losing some of the attractive benefits such as security of service if they ceased to be government employees.

Foreign aid available to the Port during the sixties was only for technical co-operation and full advantage was taken of this facility to train technical and management personnel that came under item (1) mentioned above. This enabled the Port to build up its pool of technical expertise, to identify, plan and carry out programmes of technical development that were considered absolutely essential, in keeping with the finances made available by the government. In respect of item 2 the following development works were undertaken by the CPC with its own personnel and equipment with funds provided by the government.

- 1. Widening of QEQ 3 & 4 Transit Sheds.
- 2. Widening of Jetties at Pettah for better operation of lighters.
- 3. Construction of food warehouses at Maccallum Road.

As stated at the outset since the mid-sixties there had been a decline in the volume of cargo handled by the Port and this was particularly so in the case of imports which was very largely due to the decline in rice imports. (see Table 3.11). The trade indices for the period 1956-74 (see Table 3.17) show that the behaviour of other categories of imports remained much the same. The slowing down of Colombo's trade after mid-sixties obviously made less attention being drawn on further port development activities and as a result upto the late seventies only two Port development projects were undertaken at Colombo.

It was when signs of decline in merchandise trade were seen that the CPC embarked upon the extension to the QEQ to provide the extra waterfront land for the handling of bulk fertiliser. By then the port had only a meagre 175 acres of land (including housing estates) for a water area of over 600 acres. The proposed extension was to provide over 9 extra acres of waterfront space which was comparatively a substantial increase for the land-hungry port.

Because of the curtailment of expenditure by the government the project took ten years for completion. Yet, this was considered a creditable achievement by a developing country like Sri Lanka as this major development work of unique nature was undertaken entirely by Port personnel without consultants, contractors or new equipment(Fonseka, 1995, 4-3 - 4-4). ³⁶

As has been dealt with earlier, in the realm of shipping the facilities demanded in the forties and the fifties were to meet the requirements of vessels of long draft with bigger capacity. It basically meant the provision of deep water quays that were accomplished in the fifties about which reference was made earlier. But these facilities appeared to be of trivial importance in comparison with those of the highly capaital consuming container facilities the need for which began to arise from the sixties. However, since its impact was not felt until the late seventies in that regard nothing substantial was done at the Port of Colombo.

Table 3.17

Trade Indices (1967=100) Imports-Volume (other than food and drinks) 1956-1974.

YEAR	Textiles	Other Consumer goods (Other than food and drinks)	Intermediate goods	Investment goods
1956	238	240	115	71
1957	195	257	114	102
1958	256	286	127	71
1959	228	369	142	95
1960	221	423	141	95
1961	192	140	105	92
1962	190	129	99	102
1963	108	71	82	97
1964	203	149	126	96
1965	125	94	82	92
1966	166	129	127	104
1967	100	100	100	100
1968	79	97	96	112
1969	76	108	93	104
1970	82	120	106	86
1971	65	90	82	96
1972	23	121	109	76
1973	51	119	92	47
1974	17	149	62	46
(Campan C	Santual Daul	COTT 1 A IT		

(Source: Central Bank of Sri Lanka, Annual Reports).

Port Efficiency - Signs of Recovery

The execution of the NEDECO proposals on a contracted scale alone was not responsible for whatever improvement in efficiency that the Port displayed from the mid 1960s. The declining trend in the Port's merchandise trade and shipping on the otherhand indirectly helped to minimise congestion. Port congestion in most years was also caused more by industrial chaos than by want of berths and warehouse space. There were also steps taken in the direction of improving labour relations especially by way of welfare measures as discussed earlier which positively contributed towards the enhancement of port efficiency. Through better labour relations, the Port was able to maintain industrial peace in contrast to the strike-prone dock labour force of the earlier decades. The number of man hours that the Port lost due to strikes, go slows etc. averaged at 40,686 a month from 1962 to 1971 but declined to 22,578 a month in the subsequent nine years and the Port records of the late 1970s observe complete silence about labour disputes (Shipping Economist 1984-8-9; Containerisation International 1980-53).37 The average turn-round time per ship as shown by the figures in Table 3.18 are also evidence of a gradual improvement in Port efficiency. Except in the year 1977 in all the years after 1965 the Port experienced a remarkable reduction in turn-round time. Similarly there was also a significant improvement in output per ship per day spent in the Port. For instance, the output per ship per day which was as low as 153 freight tons in 1959 rose to 275 freight tons in 1965, to 314.8 freight tons in 1973 and still further to 340 freight tons in 1976 (ESCAFE 1966; Port Statistics, Series III).38 The favourable reaction of the international shipping community on the improvement in port efficiency, for example, was symbolised by a complete elimination of surcharges on the Port of Colombo towards the end of 1965 by the following major shipping lines.

United Kingdom and Continent/Colombo Conference, Australia/Ceylon Conference,

New Zealand/Ceylon Conference,

U.S.A./India, Pakistan, Ceylon and Burma Freight Conference,

Japan/Colombo Conference (Central Bank, 1965-126).39

Table 3.18

Average Turn-round Time Per Ship (Berthing to Completion Hourse/Ship)

YEAR

=	237
=	157
=	123
= 1	131
TQ= 01	141
=	143
=	213
=	175

(Source: UN=ESCAFE Port Survey Ports of Ceylon, 1966, Port Statistics, Sri Lanka Series III)

Nevertheless, there was much remained to be done to revive Colombo's lost prestige as a major port of call in the Indian Ocean. There is evidence that even by the 1970s, the Port's efficiency was not to the desirable level. It had been pointed out that when Shipping Conferences were unable to absorb additional operational costs owing to delays arising from congestion, appropriate surcharges were introduced and there had been a marked increase in them in 1974. For example, it is on record that in that year the Shipping Conferenced introduced congestion surcharges ranging from 7.5 percent to 50 percent affecting 28 different ports in the world including Colombo. Also, as Conferences had to incur abnormal costs due to oil price hikes in the 1970s, there was the practice by them of imposing what were known as bunker surcharges. The purpose being to recoup the

losses sustained by the Conferences as a result of increased costs. Many Conferences had imposed heavy bunker surcharges which had ranged between 3.54% and 56%. Quite apart from the levy of surcharges on Colombo there was also further increases in freight rates which were considered to be too high in comparison with those charged in the 1960s. The Central Bank's Freight Rate index for Sri Lankan exports (1961=100) which showed only marginal increases in the major part of the 1960s rose sharply from 1970 onwards. The overall freight index for exports increased from 217.3 in 1973 to 234.9 percent in 1974 (Central Bank, 1974, 307-308; Central Bank Bulletin, 1974).⁴⁰

Another disturbing feature was the decline in ship visits, particularly those calling for bunker at Colombo. In 1959 ship visits that totalled upto 2,525 rose to 2,815 in 1969 but thereafter the figure dropped gradually and by 1977 it was 1,775 (see Table 3.19). The decrease in the number of ships calling at Colombo, and the world oil price hike in turn brought about a drastic fall in the number of vessels calling for bunker. The decrease became more pronounced (see Table 3.20) from the mid-1960s and by 1977 the number of ships calling for bunker was nearly one third that of 1963.

Table 3.19
Ship Visits-Colombo 1959-1977 (for selected years)
Year Ship Visits

1959	2,525
1960	2,748
1966	2,539
1969	2,815
1970	2,616
1972	1,819
1973	1,793
1974	1,579
1975	1,656
1976	1,717
1977	1 775

(Source: A.R. of the Chairman CPC; Port Statistics of Sri Lanka Series I & II)

The fate of the once prosperous transhipment trade at Colombo was worse than the bunkering trade when compared with what it had been until the mid-1950s (see Table 2.5, Chapter II) and by the late 1970s the future of that trade looked extremely bleak. In 1954, for example, the tonnage of transhipment that the Port handled which was 86,093 dropped to the lowest ever level of 1,191 in 1964 and recovered slightly and rose to 10,839 in 1973. But within a short period of two years the tonnage transhipment fell again to 3,265 and only in 1977 with a tonnage of 27,882 rose to the highest level in the period after 1958. (P(c)C)³⁸

Table 3.20
The Number of Ships Calling for Bunker - Colombo 1963-1977

YEAR	No. of Ships Calling for Bunker
1963	- 1,552
1964	- 1,702
1965	- 1,654
1966	922
1967	religion admenses College
1968	Year
1969	- 668
1970	- 570
1971	- 560
1972	- 505
1973	- 622
1974	- 522
1975	- 516
1976	- 519
1977	- 518

(Source: U.N. ESCAFE Report on Ports of Ceylon 1966; Port Statistics of Sri Lanka Series I & II)

The serious setbacks suffered by the Port of Colombo during the greater part of the post independence period were unequalled in its existence as one of world's greatest centres for shipping. The experiments made to revive its trade and shipping brought limited results. It became quite clear that improvements in labour relations alone were not enough to attract shipping. The greater need for the expansion of the country's external trade served by the Port too became imperative. The past experience of the Port of Colombo was that the country's external trade was also a determining factor for its role as a major port of call in this part of the Indian Ocean. It became difficult to ignore the casual relationship between trade and shipping. because, they reinforced each other. As was stated in Volume One, more trade demanded more shipping; more shipping stimulated new branches of trade (Dharmasena 1981, p 31).41 The conclusion to be drawn is that the Port of Colombo for the revival of its lost reputation as a centre of shipping in South Asia also had to await the revival of the country's external trade.

Chapter IV

Port and Trade Liberalization - 1977-1995

The experiments with the restrictive import policy that reached a climax in the seventies with the operation of an inward looking economic policy soon proved to be an ineffective solution to the persisting problems of the economy. The strategies followed under this policy which lasted during the period from 1971 to 1977, were designed broadly to achieve welfare and fair distribution of wealth and income within a frame-work of a self reliant economy. objectives were to be achieved through state ownership or intervention in certain key areas of production combined with encouragement of national as against foreign enterprise. Rather than an improvement, the policy initiatives put the economy into a precarious position than ever before in independent Sri Lanka. It was proved beyond doubt that Sri Lanka with a population of less than 15 million could hardly bring about an expansion of its economy through a closed-door economic policy. The ill-effects of this policy percolated to the wider spectrum of the socio-economic life of the people, the most apparent and dismaying feature being the scarcities of essential consumer goods and widespread unemployment. The latter which could be quantified and as revealed in official statistics, unemployment rose spectacularly and by 1976 went up to a figure in excess of 20 per cent of the work force. By and large, the state sector and Public Corporations became the main providers of employment and were characterised by unproductive employment as was the C.T.B. (Ceylon Transport Board) which provided a classic example. At the height of the days of unproductive employment, the C.T.B had 65,000 workers and the operative strength of the bus fleet at that time was 5000 which in effect meant 13 persons per bus (Kelegama 1986-12, Karunatilake, 1991,4).1 The general economic

situation in the country, being such the new government that came into power in 1977 followed the most pragmatic policy of an outward-oriented development strategy to boost up a stagnant economy.

The impact of such policy began to be felt in almost every sector of the national economy which inevitably exerted a salient impact on the Port of Colombo in changing its destiny. The study of the Port in the post 1977 years, hence cannot be isolated from an analysis of the open economy policy. The impact of the new economic strategy, it must be mentioned, at the outset, was not merely a growth in the merchandise trade of the Port of Colombo. In the wake of the growth in the Port's merchandise trade were changes in the composition of imports and exports, the direction of trade etc. which compared with the pre-trade liberalisation period appeared to be revolutionary. Similarly, in the realm of shipping too it was also not simply a case of an increase in the number of ship visits by shipping lines and the resultant growth in the tonnage of shipping. The growth of shipping was accompanied by an equally radical change from the past of the purpose of ship visits, the nationality of shipping calling as well as the direction of shipping using the Port. Above all, the change in the type of vessels patronising Colombo itself appeared to be much more revolutionary. These changes in operation after 1977 in turn exerted a marked impact on the formulation of a national ports and shipping policy in the 1990s about which reference will be made in a subsequent discussion. In an analysis of the economic transformation that was taking place, as a result of such trade policy, Sri Lanka, however, cannot be treated in isolation with contemporary global changes.

When the country stepped towards an export-oriented growth strategy that had already become the trend in the world. Closer home, for example, were the countries like Hongkong, the Republic of Korea, Taiwan, Singapore, Indonesia, Malaysia

and Thailand which had already achieved high growth rates through export promotion and proved worthy of being emulated by Sri Lanka. What was more the success stories of these countries also spoke equally of the success of port infrastructure development activities undertaken to facilitate the development of external trade.

The average annual growth rate of real GDP in ASEAN countries in 1970-75, for example, was 7.8%, that of Indonesia, Malaysia and Singapore exceeded 8%. Republic of Korea, showed a growth rate of 9.8 per cent. In the South Asian countries where there was greater state control over economic activities at this time, on the other hand, growth rates were much lower: Bangladesh 3.6%; Burma 2.5%; India 2.5 per cent; Pakistan 4.5%; and Sri Lanka 4.2%. These growth rates in comparison with those of the ASEAN countries given above were quite convincing for the government in 1977 to introduce a series of economic reforms aimed at trade liberalisation which was to be accomplished in two stages. During the first phase (1978-88) the primary objective of the policies introduced was the liberalisation of the economy the main features of which were as follows:

- (a) Reducing the role of the state in economic activities;
- (b) Open door policy regarding foreign investment; offer of attractive incentives and tax holidays to foreign capital and invitation to foreign banks, which had hitherto been disallowed to open branches;
- (c) Privatisation;
- (d) Transfer of resources from welfare or consumption to investment by limited consumer subsidies to most needy groups;
- (e) Unification of the basic and FEECs (Foreign Exchange Entitlement Certificates) rates of exchange and devaluation of the rupee; adoption of the policy of

Floating Rupee thereafter resulting in a gradual depreciation of the rupee year after year; the new exchange rates were designed to provide better export incentives and to eliminate price distortions arising from an over-valued currency and stimulate domestic agricultural production;

- (f) Relaxation of controls on imports and exchange payments and remittances allowing free imports without controls except in a few items on the basis of a revised and lower tariff structure; trade liberalisation was designed to revive domestic industry by free flows of machinery, spares and raw materials as well as to stimulate new areas of private business activity;
- (g) Abolition of price controls on most items and other regulations on business activity as to allow free market forces to operate;
- (h) Mobilisation of external assistance on a large scale to finance an ambitious Development Project as well as to meet balance of payments strains resulting from open or free economy and liberalised imports; and
- (i) Shift of emphasis from import substitution industries to export oriented industries particularly in a Free Trade Zone or Export Promotion Zone and the establishment of the Export Development Board and Export Credit Insurance Corporation towards this end.

The second phase commenced in 1989 was heavily centered on further relaxation of the remaining restrictions in order to create an environment conducive for the private sector to operate efficiently. The underlying features in the reforms introduced after this year were to provide more incentives to foreign investors, relaxation of restrictions on foreign travel and payments, additional foreign currency banking facilities and further easing of licensing requirements in the spheres of trade and industry. To sum up the main objective of the whole

liberalisation exercise was the integration of the Sri Lankan economy with the global economy the ultimate aim of which was promoting exports (Kelegama, J.B., 1986-12-13; Hettiarachchi, 1991-16-22).2 In the context of the existing state of world trade and the progress made in trade liberalisation by some countries in the region the task of export promotion by Sri Lanka appeared difficult. At the time of Sri Lanka entering the path to trade liberalisation, some of these countries in the region had attained NIC status. The success of export promotion, therefore, very largely depended on the competitiveness of our exports. That entailed technology transfer, infra-structure development, and the maintenance of a high level of port efficiency particularly in view of the container explosion taking place in the 1980s. More importantly, most countries of the region removed trade barriers during a period of world recession which reinforced the need to make our exports even more competitive.

Recent studies show that the major industrialized countries (G-7) were either in recession or were recovering slowly from recession. Growth of real GDP in these countries fell from 3.4 per cent a year in 1982-1989 to 1.5% in 1989-1992 with that of U.S.A. falling from 3.5% to 0.5% and that of Japan declining from 4.2% to 3.7%. As a result of such growth pattern in industrialized countries world economic growth dropped from 3.5% a year in 1982-89 to 1.4% in 1989-92 while the growth of world trade fell from 4.5% a year in 1965-90 to 3.5 per cent in 1990-92. Although economic forecasts pointed generally to a higher growth in 1993 and 1994 these forecasts have been revised downwards from time to time and growth prospects had become largely uncertain. One of the major factors for the aggravation of recession in the industrialized countries during the period that Sri Lanka ventured into trade liberalisation was the unprecedented economic collapse of the former Soviet Union and Eastern Europe. These countries have been experiencing falling production; their economic growth as a

group was minus 16.0% in 1991 and minus 18.4% in 1992. The trends indicate that the leading industrialized countries were not growing rapidly enough to pull the world out of recession. The recovery was modest and the economic growth in the early 1990s in general was not expected to reach the high growth rates of the previous decade. The World Bank in fact, projects only in an average annual growth rate of 2.0 - 2.7% for the G-7 countries in 1992-2000 as compared to 3.4% in 1982-1989 (Kelegama, 1994, 3-4).³

The heavy dependence on industrial countries on the export of primary products as well as of FDI (Foreign Direct Investments) made the impact of world economic recession felt more adversely on developing countries in general than the others. However, some developing countries in the Asia-Pacific region did not seem to have been weakened by the recession in the industrialized countries. Their economic performance was the other way about showing a growth rate of 6.1% in 1993. The main attribute for such growth was the remarkable buoyancy of the region's external trade whose performance in 1991-92 with average annual growth in value of around 15% surpassed even that of the 1989-90. Primarily, increasing competitiveness of exports, diversification of export markets, domestic reforms to achieve financial and monetary stability, liberalisation of trade, better investment climate and higher productivity had contributed to this impressive growth in overseas trade. At the same time there was a significant reduction in the dependence of the developing countries of the Asia-Pacific region on the industrialized countries for their exports became clear because of the development of intraregional trade. It was found that from 1990 to 1993 nearly one third of their exports found markets among themselves. In fact this had been the trend since the early 1980s. East and South East Asia were undoubtedly reckoned as the most rapidly growing region in the world. Its GDP increased at an annual average rate of 8.0% during this decade. In contrast, the annual

average growth rate during the same period was 1.6% in Middle East and North Africa, 1.9% in South Asia. What was more, its GDP per capita increased by 6.4% while that of South Asia rose by only 2.9%. China, Hongkong, Taiwan and the Republic of Korea in East Asia have been growing more rapidly than Indonesia, Malaysia, Philippines, Singapore and Thailand in South East Asia.

Within the rapidly growing East and South East Asian region, the region described as the 'Chinese Economic Area' consisting China, Hongkong and Taiwan occupy an enviable position in economic growth. The total exports to the world of these countries constituting the 'Chinese Economic Area' accounted for 57% of the total exports to the world of all developing countries of Asia and the Pacific in 1991. The share of China and Hongkong in inter-regional trade among the developing countries of Asia was the highest. The two countries together accounted for 52% of that trade in 1991. According to World Bank forecasts, these countries will enjoy the highest growth rate in the world in the 1990s. The Bank estimates that their annual growth rate would be about 8 per cent and goes on to say that by the year 2002 the three countries are likely to be the "Fourth Growth Pole" in the world economy. The others being North American, European community, and Japan.

The next in line in the fast growing economies have been Indonesia, Malaysia, Singapore and Thailand of the ASEAN. Although lower than in 1989-90 they registered an 8% growth rate in 1991-92. It is alleged that the slow down in economic growth rate in these countries in that year compared with 1989-90 was largely due to the decline in their export values. Despite the lower growth rate in 1991-1992 the performance in the export sector was relatively high largely because of the fact that one-third of the ASEAN exports were sold in developing countries of Asia.

The SAARC Countries which comprise the majority of the South Asian countries provided a contrast with East and South Eastern Asian economies in terms of economic growth. Relatively, their economic performance had been dull in the decade 1982-92. Stated in annual averages their growth rate in that decade was 5.2% compared with that of East and South East Asia of 8.0%. In the case of Sri Lanka it was 4.5% and was above India, Bangladesh, Nepal and Maldives but was behind Pakistan whose annual average growth rate during the period was 6.0% (Kelegama op.cit 11-12).4

Similarly, the South Asian countries' share of world exports was pathetically low when compared with that of the majority of East and South East Asian countries. According to data available, in the period 1977 and 1990 world export market shares of NIC's (Hongkong, South Korea, Singapore and Taiwan) increased by 135% while that of Malaysia and Thailand increased by 61 and 128% respectively. In the case of Bangladesh her world market share of exports during those years increased only by .08%. Pakistan on the other hand with a percentage share rising to 45 by 1990 fared better. Surprisingly, India whose share of world exports which was 0.89% grew at a snail's pace and rose only to 1% by 1990. With the exception of a few years when Sri Lanka experienced commodity price booms her total market share had been on a downward trend. In 1990, Sri Lanka was able to recapture its market share by 13% point but in terms of market penetration the performance of Sri Lanka's exports sector had been somewhat below expectations (Jayatissa, 1991, 84-85).5

The preceeding brief account of the economic performance of the Asian region as a whole after 1977 gives some idea of the relative strength of the Sri Lankan economy vis-a vis (a) the East and the South East Asian economies and (b) the economies of the SAARC region. It is quite clear that despite trade liberalisation our economic performance in relation to the former had been poor. But in fairness to Sri Lanka it must, however, be

said that these countries commenced restructuring their economies long before Sri Lanka did and, besides, they had been enjoying political stability for quite some time which is among other things, is a prerequisite for sustained economic growth.

Although Sri Lanka lagged far behind the countries of the South East region, nevertheless, it is no matter for disappointment when its economic performance is compared with that of the pre-open economy period. In fact the country can be proud of some of her remarkable gains made after 1977. In terms of economic growth Sri Lanka within a decade of trade liberalisation managed to surpass SAARC countries, except Pakistan. But by 1990 Sri Lanka overtook Pakistan with a dramatic growth rate of 6.2% compared with the poor 2.5 per cent growth rate in the preceding year (Central Bank, Sri Lanka).6 The average annual growth rate which was as low as 2.9 per cent for the years 1971 to 1977 (see Table 4.1) more than doubled to 6.0 per cent in the first five years of trade liberalisation. The decline in the growth rate from 1984 to 1989 was largely due to the ethnic war in the North-East Sri Lanka coupled with the youth uprising in the South in the latter part of the 1980s. Despite the crises the economy picked up by 1990 with the growth rate rising to 6.2%. Because of the severe drought which affected plantation agriculture in 1992 the rate fell to 4.3% but recovered in the following year to reach the record level of 6.9%.

Thereafter the rate dropped to 5.6% and 5.5% respectively in the years 1994 and 1995. The reason being that all sectors of the economy grew at a slower pace than in 1993 in the context of unfavourable developments in the macro economic developments and policy slippage in the midst of national elections and remained more or less at the same level in 1994 (Central Bank of Sri Lanka, 1994). Regardless of the slight variations the high growth rates achieved by the country in the early 1980s according to Central Bank sources, were

attributable primarily to further liberalisation measures and structural reforms, a surge in capital inflows and a booming capital market (Ibid 1993).8 The far reaching changes that were in operation in the economy of Sri Lanka inevitably had a tremendous impact on the Port of Colombo by an unprecedented growth in its cargo and shipping movements. The booming cargo trade and shipping in turn created the need to provide port facilities which of course, were altogether of a different type from what had traditionally been made available.

Table 4.1
GDP Growth

Period	%
1971-77	2.9
1978-83	6.0
1984-87	4.0
1988-89	2.5
1990	6.2
1992	4.3
1993	6.9
1994	5.6
1995	5.5

(Source: Central Bank of Sri Lanka.)

Growth in the Volume of Trade

From the point of view of port operations the immediate outcome of economic restructuring was the faster recovery of Sri Lanka's trade. Compared with the period prior to 1977 in scale it was unsurpassed in any time in the post independence period which by itself can be considered a great achievement of trade liberalisation policy. Between the quinquennials 1973-77 and 1978-82 Sri Lanka experienced a 23.2% in the growth of its trade, whereas in the periods between 1983-87 and 1988-92

the rates of growth were 11.2% and 12.2 respectively (Table 4.2). Considered in terms of annual increases in the volume of the country's overseas trade in the post 1977 period the growth rates appear to be much more impressive than those of five year averages. The growth in the volume of Sri Lanka's imports and exports to 4,544,979 in 1977 was indicative of 7% increase in four years whereas its rise to 11,958,698 in 1992 meant a percentage growth of 148% in fifteen years (SLPA). That alone explains the impact that the open economy policy had on the country's foreign trade and the increased volume of cargo that the Port of Colombo was called upon to handle.

Table 4.2

Tonnage of Imports and Exports* - Sri Lanka and the Port of
Colombo 1973-95
(Quinquennial Averages)

Period	Total Sri Lanka	Percentage increase	Share of Port of Colombo	Percentage Share of Port Colombo
1973-77	4,404,511	•	4,216,433	96
1978-82	5,416,356	23.2	4,907,911	91
1983-87	6,031,148	11.2	5,177,286	86
1988-92	6,775,100	12.2	5,689,780	84
1993	8,077,200	19.0	6,662,200	82
1994	8,713,100	8.0	7,173,600	82
1995	9,701,300	11.0	7,924,800	81

^{*} The tonnage of imports and exports includes domestic cargo discharged and loaded, care weight of discharged domestic containers, and tonnage of coastal services discharged and loaded.

(Sources: SLPA, Port Statistics Series III, V, VI, VII, VIII, X, XIII, XV, and XVI)

The sharp increase in the volume of Sri Lanka's overseas trade was accompanied by an emergence of certain features, some of which seemed unique in comparison with those of the earlier phase. When the total volume of dry cargo including domestic cargo discharged and loaded, during the period is disaggregated into imports and exports not only did the formers' dominant position in the country's overseas trade remained unaffected but its growth was faster than what was earlier. This difference was reflected in the volume of dry cargo imports handled by Colombo (Table 4.3) since the early seventies.

Table 4.3

Volume of Dry Cargo Handled by the Port of Colombo 1971-1995

(Quinquennial Averages)*

Period	Total Tons	% Increase	Imports Tons	% Increase	Exports Tons	% Increase
1971-75	2,411,689	1881-	1,539,889	- S	851,984	-
1976-80	2,962,106	18.6	1,707,229	9.8	1,056,559	19.3
1981-85	3,978,867	25.6	2,436,208	30.0	1,492,655	29.2
1986-90	8,298,320	52.0	5,069,540	51.5	3,226,600	46.2
1991-95	11,207,200	26.0	6,698,680	24.3	4,606,340	31.3

(Sources: SLPA, Port Statistics Series III, V, VI, VII, VIII, S, XV and XVI)

Surprisingly, the upward trend in the volume of dry cargo handled by Colombo was taking place during a period when two forces were in operation which under a restrictive trade regime would have had a determintal effect on the total volume of cargo that the Port handled.

Since the late seventies, Colombo was relieved of handling wheat grain in bulk as an intermediary good and which began to be discharged at Trincomalee where the Prima Factory for flour milling is located. An idea of the extent to which Colombo was spared of handling that item of cargo could be

gathered from the fact that the volume of wheat unloaded at Trincomalee that was 197,000 MT in 1980 nearly trebled by 1983 and was 579,000 MT (see Table 4.4). Increasing steadily thereafter the wheat imports at Trincomalee moved upto the very high level of 1.057,000 MT in 1995. Earlier, this was a kind of cargo that was entirely channeled through the Port of Colombo.

Table 4.4

Imports of Wheat in bulk, Port of Trincomalee,
1980-1995

YEAR	Wheat
	Imports(000 MT)
1980	197
1981	439
1982	495
1983	579
1984	571
1985	665
1986	681
1987	578
1988	612
1989	726
1990	577
1991	670
1992	709
1993	771
1994	865
1995	5,057

(Source: Sri Lanka Customs)

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More than the transference of bulk import of wheat to Trincomalee, a factor that would otherwise have adversely affected the total volume of dry cargo or more specifically food cargo imports was the upward trend in paddy production since the seventies. The steps taken to increase paddy production began to yield better results in the eighties and in the early nineties than those that were taken earlier. Apart from higher yields there had also been a relatively greater expansion in the area under paddy than before which was very largely an attribute of the successful implementation of the Accelerated Mahaweli Programme (AMP) commenced after 1977. The yield per acre that was 928 kg in 1974 rose to 2,750 kg by 1979 and ten years later in 1980 it had increased remarkably to 3,374 kgs and still further to 3,535 kgs by 1995 (Central Bank Annual Reports).10 Notwithstanding the relaxation of import restrictions with the commencement of the open economy policy Sri Lanka's efforts to expand the gross extent under paddy cultivation continued unaffected, perhaps with much more vigor partly due to the AMP and partly due to the fairly satisfactory commercialisation of paddy cultivation (see Table 4.5). The gross extent cultivated with paddy which was 725,238 hectares in 1973 rose by nearly 100,000 hectares in ten years to 824,101 hectares.

In the early nineties weather conditions affected the area under paddy cultivation but by 1994 recovery was seen with the gross extent under paddy reaching the very high level of 929,621 hectares. By 1990, the AMP alone had added 114,388 hectares to the area under paddy cultivation and had produced as much as 389,182 MT of paddy. As mirrored in Tables 4.6 and 4.7 these trends in the paddy sector contributed primarily to the remarkable gains made in the gross extent brought under cultivation as well as the domestic production of paddy in independent Sri Lanka.

Table 4.5

Gross Extent Under Paddy Cultivation 1973-1995
(hectares)

YEAR	Gross Extent
	Under Paddy
1973	725,238
1974	824,773
1975	
	695,805
1976	723,939
1977	828,065
1978	877,910
1979	838,626
1980	844,647
1981	876,746
1982	844,163
1983	824,101
1984	990,197
1985	880,691
1986	897,448
1987	781,232
1988	867,807
1989	726,954
1000	856,710
1991	720 416
1000	803,173
1993	834,263
1994	929,621
1995	915,021

(Source: Data Development Unit of the Agrarian Research and Training Institute Sri Lanka ARTI).

Table 4.6

Local Production of Paddy, 1970-1995

YEAR	Paddy
	Production
	(in 000MT)
1970	1,616
1971	1,396
1972	1,312
1973	1,312
1974	1,602
1975	1,154
1976	1,253
1977	1,677
1978	1,891
1979	1,917
1980	2,133
1981	2,230
1982	2,156
1983	2,479
1984	2,420
1985	2,661
1986	2,588
1987	2,128
1988	2,477
1989	2,063
1990	2,538

(Sources: Central Bank of Sri Lanka, Annual Reports, ARTI)

In the final analysis the paddy sector's greatest contribution during the period has been helping the long cherished national aspiration of putting Sri Lanka on the path to self sufficiency in rice, the staple food of the bulk of the population. The domestic supply to meet Sri Lanka's growing demand for rice had been such that from the early eighties rice imports began to decline and by 1995 it had dropped to the record low level of

9000 MT. What is important from the point of view of the subject under review is that an item of imports that bulked the Port's volume of imports fell into an position of insignificance due to the success achieved by the paddy sector. Quite apart from reducing the dependency on imported rice, Sri Lanka also achieved the credit in 400 years of exporting 8,700 MT of rice in 1978 (P(c)C 1978).¹¹

Table 4.7 1200.5

Rice Imports, Sri Lanka, 1975-1995

YEAR	Rice
	Imports
	(in 000 MT)
1975	465
1976	378
1977	538
1978	187
1979	212
1980	168
1981	168
1982	174
1983	147
1984	38
1985	211
1986	231
1987	113
1988	210
1989	316
1990	
1991	133
1992	237
1993	209
1994	58
1995	9

(Source: Sri Lanka Customs.)

Nevertheless, the contraction in the import of rice which for decades constituted as one of the most important items in the category of break-bulk cargo in the Port of Colombo scarcely affected the volume of dry cargo it annually handled after 1977. The shortfalls in the volume of rice imports began to be compensated by increases in the other categories of food imports. The reason being that the progress made in Sri Lanka's path to self sufficiency in rice did not, as anticipated by the policy makers, bring about self sufficiency in terms of food security to a level sufficient enough to have affected the total volume of food imports. A recent research revealed that as late as in 1994 in food security Sri Lanka was self-sufficient not more than 65% (Abeyratne 1994).12 Therefore, the deficiency in the break-bulk category of cargo was made good by the import of other kinds of food cargo such as wheat flour. With regard to wheat flour imports it had to be said that although wheat grain in bulk were unloaded in Trincomalee for the Prima Factory for milling the flour produced there continued to be distributed through Colombo. Similarly sugar which was also an important item coming under food imports also contributed largely to keep up the volume of food cargo handled by the Port in the post import liberalisation years. The volume of sugar handled at the Port that was 283,000 MT in 1970 dropped sharply to 24,000 MT by 1976 in consequent to the restrictive trade policy of the 1970s. But with the change in the import policy an upswing in the import of that item of cargo began and by 1985 sugar imports rose to the relatively very high level of 388,000 MT and by 1994 moved further upto 491,000 MT (Sri Lanka Customs, Central Bank of Sri Lanka). 13 While the imports in the category of food were maintained at a uniform but at a higher level except in some years what overwhelmingly added to the growing volume of Colombo's imports was other types of cargo. Those consisted of such items as cement, fertiliser, machinery, textiles etc. imported in bulk to meet the demands of lead projects - AMP, EPZs (Export Promotion Zones), Urban Development etc. that were launched

after 1977 and which were in progress during this period. The new trends in operation in the economy after 1977 very largely added to the flow of dry cargo at the Port. So much so that the total tonnage of such cargo that Colombo handled in 1976 that was 585,471 appeared trivial compared with the tonnage it handled for instance in 1979, 1985, 1988 and 1994 (Table 4.8) amounting to 1,059,234, 2,702,347, 5,008,917 and 9,742,000 respectively.

Table 4.8

Tonnage of Food Cargo and Other Dry Cargo Imports at Colombo 1976-1994
(Selected Years)

YEAR	Food Cargo	Other Dry Cargo
1976	659,300	585,471
1977	958,166	753,912
1979	779,160	1,159,899
1982	. 285,705	1,639,577
1985	623,012	2,702,347
1988	754,761	5,008,917
1994	771,000	9,743,000
1995	000 MT and by 1994 mov	bigh level of 388,

(Sources: P(c)C, SLPA Annual Reports, Central Bank of Sri Lanka Annual Reports).

Diversification of Imports

The growth in the Port's volume of imports at an exceptionally higher level was a direct result of the reversal of

the restrictive import policy that was in force in the pre-1977 period. But that by itself would not have been a matter of serious concern for the Ports Authority since spells of unusually large volumes of imports had been handled by the Port during times when Sri Lanka enjoyed considerable balance of payments surpluses. What was remarkable about the post 1977 period had been the exceptionally greater variety of commodities entering the import sector. Also the emergence in value terms of hitherto unimportant types of commodities over those that held away uninterruptedly for nearly a century both in terms of value and volume. The expanding industrial sector created a growing demand for imported inputs which came to be broadly categorised as intermediate and investment goods. Within that category of import cargo the former assumed greater importance and so was its total value over those of other categories of imports. Miscellaneous goods and those of mass consumption which accounted for more than 50% of the total value of imports in the seventies (Table 4.9) were gradually being overshadowed by the category of imports mentioned above. The value of intermediate goods, which constituted 20% of the total value of imports in 1979 more than doubled to 46.8% in 1980 and in 1993 and in 1995 with 53.7% and 54.6% respectively occupied the position held by miscellaneous and goods of mass consumption classified as consumer goods. In the year 1995 intermediate and investment goods together formed 77% of the total value of imports. Whereas the share of consumer goods had approximated to 19%. Within the broad category of intermediate goods, textiles and clothing that were essential inputs for the expanding garments industry contributed very substantially to the increasing value of imports.

The increasing value of intermediate and investment goods in the total value of imports was a reflection of the shift of emphasis from agricultural exports to industrial exports from the late seventies. The main objective of fiscal and other reforms

Table 4.9

The value of Consumer Goods, Intermediate Goods, and Investment Goods stated as a percentage share of the total value of imports of Sri Lanka 1970-1995 (for selected years).

YEAR	Consumer Goods	Intermediate Goods	Investment Goods
1970	58.8	19.5	23.5
1973	54.3	28.4	16.4
1974	49.0	40.6	9.6
1977	42.0	44.0	12.0
1978	38.0	38.0	23.0
1979	35.0	41.0	24.0
1980	28.8	46.8	24.0
1985	19.4	54.2	19.2
1986	22.5	52.4	19.4
1987	22.8	57.2	18.7
1988	24.5	56.8	17.0
1989	26.1	56.4	15.0
1990	26.4	51.8	21.7
1991	25.6	50.7	23.5
1992	21.0	53.8	24.2
1993	19.3	53.7	26.1
1994	19.5	50.8	28.6
1995	18.5	54.6	22.4

(Source: Central Bank of Sri Lanka Annual Reports.)

introduced in pursuance of the open economy policy. The means by which this was to be achieved was through FDI and greater involvement by the private sector as opposed to the heavy public sector involvement in industry in the past. Initially, the promotion of industrial exports was to be through IPZs (Investment Promotion Zones) and in view of the concentration in the Western Province of the infrastructure facilities these were set up in Katunayake and Biyagama coming under the same province and later on in Koggala in the Southern Province. Out of the 442

enterprises in commercial operation by the end of 1994, 92 were in the Katunayake IPZ, 38 in the Biyagama IPZ and 301 in the other parts of the country (Central Bank of Sri Lanka, 1994). Apart from the setting up of IPZs for the purpose a shift of policy was subsequently in operation to take industries to the less developed districts in Sri Lanka. Consequently, the commencement of the Two Hundred Garment Factory Programme as the first step in this direction. Under the programme, 160 garment factories were in operation in 21 districts by the end of 1995. Of these, 86% or 137 garment factories were located outside Colombo and Gampaha districts (Central Bank, 1995-96). But irrespective of their location, Colombo invariably had to be the Port to serve them.

The industries that flourished with the reversal of the economic policy fell broadly into nine groups and within each group were included a number of industries producing more or less like products. As has been referred to at the outset the majority of the industries depended heavily on imported raw materials, machinery and spares. While the raw materials and spares became recurring items of imports the import liberalisation facilitated the acquisition of these without difficulty. Facilitated by governmental patronage in various forms, the proliferation of industries took place at a rapid pace. The most important of them being chemicals, food and beverage, basic metal products, textiles and garments and non-metallic mineral products. Within these industries textiles and garments were the fastest growing industries which in addition depended more heavily on imported inputs than the rest. According to available data, the value of raw materials used in industry which were procurred locally and from foreign sources that was Rs. 22,651 million in 1986 had gone upto Rs. 72,714 million in 1992 and by 1995 the figure had risen to Rs. 122,623 million suggesting approximately fivefold increase in nine years. In 1986, the cost of raw materials accounted for 55% of the total value of industrial input and was the same in 1995 (Central Bank 1986-90, 1995-44).16 If that percentage is taken as the norm in the value of input of raw materials in

industries in the trade liberalisation period a rough estimate of the value of raw materials used could be formed from the figures relating to the value of industrial output given in Table 4.10.

Table 4.10

Value of Industrial Production 1977 - 1995 (Rs. Million)

YEAR	Value of Industrial
	Output
1977	7,007
1978	8,852
1979	10,781
1980	18,311
1981	23,010
1982	25,904
1983	28,434
1984	35,653
1985	38,692
1986	41,453
1987	48,540
1988	54,063
1989	64,907
1990	86,756
1991	103,924
1992	136,106
1993	166,475
1994	190,643
1995	221,440

(Source: Central Bank, 1986 Table 9, 1995 Table 17)

Because of the dearth of data pertaining to the value of raw material imports, its share in the total value of industrial production cannot be ascertained with some degree of accuracy. But the fact that in the absence of industrial raw materials locally for majority of industries started during the period there is no reason to entertain doubts about the fact that a very large proportion of raw material requirements were met from imports.

The scantily available data regarding the distribution of the value of local and foreign raw materials in respect of public sector industrial enterprises is reasonably acceptable evidence (Table 4.11) of that conclusion. In 1977 the value of local raw materials in the total value of public sector industry which was Rs. 1,425 million rose to Rs. 3,749 million in 1982 but dropped to Rs. 1,374 million by 1985 suggesting that local raw materials began to play a negligible role in the fast growing industrial sector after 1977. Whereas, the value of foreign component in the total value of raw materials used in that sector which was Rs. 2,761 million in 1977 rose to Rs. 13,238 million in 1982 and declined to Rs. 10,994 million in 1985. That decline in 1985 does not, however, stifle the importance in the use of imported raw material component in that sector. From the point of view of the subject under consideration the Port's cargo movements during the period, the rising value of industrial production at least to some extent added to the volume of exports via Colombo.

Table 4.11
Use of Local and Foreign Raw Materials in Public Sector
Industry 1977-1985 (Rs. Million)

YEAR	Value of Local Raw Material	Value of Foreign Raw Material	Total Value of Raw Material	% Value of Local Raw Material
1977	1,425	2,761	4,186	34
1978	1,151	4,332	5,483	20
1979	1,258	. 5,729	6,987	18
1980	1,301	10,720	12,021	10
1981	2,051	13,165	15,216	13
1982	3,749	13,238	16,987	22
1983	1,300	10,154	11,454	11
1984	1,745	10,828	12,573	13
1985	1,374	10,994	12,368	11

(Source: Central Bank of Sri Lanka, 1980.)

The anticipation that economic reforms of post 1977 era would veer Sri Lanka more towards an export oriented economy was justified by the developments in the export sector during a few years of their implementation. The economy was diversified significantly and, besides, earnings from industrial exports began to grow sustainiably to the extent that by the beginning of the present decade the export sector made a break with the past. In value terms the industrial sector had begun to reign supreme as the agricultural was for more than a century. Until the seventies Sri Lanka's export earnings had been almost completely accounted for by the export of three plantation products tea, rubber and coconut products. As late as by 1976, for example, the value of agricultural exports constituted 76.0% of the total value of exports whereas that of industrial exports was not more than 15% (Table 4.12). Surprisingly, by 1982 a reversal was taking place when the share of the latter had more than doubled to 38% whilst that of the former had declined to 55%. In 1995 the value of industrial exports had risen more spectacularly to 75% of the total export earnings and consequently occupied the foremost position that export agriculture held twenty years ago in 1976.

The analysis of Sri Lanka's export sector in value terms although indicates the vast change it had undergone by the mid 1990s that nevertheless cannot be taken as an index to the volume of cargo passing through Colombo. This is largely because of the fact that the export sector began to feel the world inflationary pressure that was mounting. The increasing value of petroleum exports can be taken as a case in point as its growing value was due rather to a result of price escalation than to an increase in the volume of exports.

The impact of world inflationary pressure on value of exports, in fact was a common feature in most countries in the region. But this had been more true of Sri Lanka's main agricultural exports tea, rubber and coconut products during the greater part of the period of trade liberalisation and much of the gains made in the plantation sector had been more due to price hikes than due to increases in the yields.

Table 4.12

Percentage Share of the Value of Agricultural and Industrial
Exports in Total Exports (in value)

YEAR	Value of Total Exports (in Rs. Million)	Agricultural Exports %	Industrial Exports %
1976	4,815	76	15.0
1977	6,638	74	14
1978	13,206	78	14
1979	15,273	70	24
1980	17,595	61	33
1981	21,043	57	34
1982	21,453	55	38
1983	25,096	58	46
1984	37,346	60	48
1985	36,206	52	48
1986	34,072	46	46
1987	41,132	42	48
1988	46,927	48	48
1989	56,175	38	50
1990	76,623	36	52
1991	82,224	32	61
1992	107,855	24	71
1993	138,175	22	72
1994	158,553	21	74
1995	195,116	21	75

(Source: Central Bank of Sri Lanka, 1979, 1986, 1995.)

While the measures taken to increase plantation crops brought limited results, the plantation sector was also affected by adverse weather conditions. The increase in the volume of tea exports had been marginal or had been at a uniform level whereas the volume of rubber exports (Table 4.13) had begun to decline steadily from the early 1980s. By 1995, for instance, rubber exports had declined to 68 million kg from 138 million kg in 1978 depicting a percentage drop of 50 in seventeen years. The same had been more or less true of the volume of export of coconut products and, therefore, needs no comments. It must however be stated that the fluctuating fortunes of the plantation sector in this manner, was not a feature peculiar to the period under survey but had been so throughout its long history.

Fortunately, in the recent past the deficiencies in the output of major agricultural products, at least to some extent, had been made good by entry of a large variety of minor agricultural products to Sri Lanka's export sector. Though difficult to provide statistical data pertaining to each of these products those given under the broad heading of unspecified minor agricultural products for export may provide some basis to evaluate their contribution to the (Table 4.14) export sector during the period after 1979 when statistical information is available. The export of minor agricultural products in 1995 rising to 53,545,000 kg. for instance from 7,704,000 kg in 1980 signifies the importance that such products have been assuming from that year.

Fable 4.13

Volume and Value of Major Agricultural Products 1976-1995

	Coconut Products	Value (Rs. Million)	374	334	971	1,297	733	1,010	1,002	1,409	1,552	2,383	1,608	1,422	895	1,920	1,842	1,769	2,664	1,846	2,475	3,520	
	Coconnt	Volume (Million Nut Equivalent)	803	280	594	537	239	400	564	582	327	934	1,105	538	224	571	507	366	411	292	436	578	
of Major Agricultural Products 19/6-1995	Jec	Value (Rs. Million)	688	930	2,020	2,491	2,590	2,889	2,322	2,851	3,301	2,565	2,622	2,929	3,705	3,112	3,080	2,641	2,959	3,086	3,582	5,712	
	Mudi	Volume (Million Kg)	137	135	138	128	121	132	131	125	126	120	110	106	66	98	98	92	78	69	69	89	
volume and value		Value (Rs. Million)	2,099	3,502	6,400	5,722	6,170	6,444	6,342	8,295	15,764	12,002	9,252	10,653	12,298	13,663	19,823	17,866	14,893	. 19,911	20,963	24,463	anka)
		Volume (Million Kg)	199,961	185,758	192,699	187,545	184,701	183,363	181,036	157,931	204,195	197,999	207,829	201,120	219,823	204,200	215,990	212,395	181,676	218,408	229,561	240,802	Source: Central Bank of Sri Lanka
VFAR	WUTT		9261		1978	1-2		'nÔ		7.00			1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	(Source: C

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Table 4.14

Volume of Export of Minor Agricultural Products 1979-1995

YEAR	Export of Agricultural Products (in 000 kgs)
1979	10,812
1980	7,704
1981	9,931
1982	9,374
1983	14,382
1984	11,848
1985	10,739
1986	14,096
1987	10,687
1988	13,634
1989	13,827
1990	19,286
1991	12,995
1992	17,044
1993	19,483
1994	52,458
1995	53,545

(Sources: Sri Lanka Customs; Central Bank of Sri Lanka.)

As stated earlier the growing world inflationary pressure on commodity prices may distort the volumewise export of industrial products during the period. Despite that the industrial sector in some measure had contributed to the volume of exports channelled through Colombo. In dealing with the import sector it was revealed that intermediate goods that included industrial inputs added significantly to imports compared with consumer goods. The Central Bank trade indices regarding the volume of imports for the years 1986 to 1994, for example, amply demonstrate this assumption. The

overall index for imports that was 100.8 in 1986 rose sharply after 1990 to reach 153.8 in 1994. But within the category of imports the rise in the index for intermediate goods had been spectacular as it rose from 124.1 in 1986 to 258.3 by 1994. More spectacular had been the rise in the index for textiles and clothing that went up to 313.9 in 1994 from 160.4 in 1986. The indices in respect of import of intermediate goods is proof of the expansion in the capacity of industrial production. That in turn was reflected in the growth of exports. While the index for total volume of exports rose to 183.7 in 1994 from 105.2 in 1986 that of industrial products had surpassed the former by an increase in the index from 115.7 in 1986 to 278.0 in 1994 (Central Bank of Sri Lanka).¹⁷

The items that contributed very substantially, to the total value of Sri Lanka's industrial exports in the eighties and in the early nineties had been garments and textiles. The value of industrial exports that was Rs. 7,455 million in 1981 rose astronomically to Rs. 147,069 million by 1995 of which more than half was subscribed by the export of garments and textiles. In 1981 almost 40% of the value of industrial exports came from that kind of exports whereas by 1995 it had risen to nearly 65%. But between garments and textiles the former contributed very largley to that increase in the value of industrial exports. For example, in 1982 the earnings from textiles was only Rs. 14 million out of the total value of exports that amonted to Rs. 8,270 million whereas the share of garment exports was Rs. 3,443 million. By 1994 when the total value of industrial exports shot up to Rs. 116,743 million the total value of textiles exports was Rs. 2,093 million as against Rs. 68,944 million of garment exports (see Table 4.15). The significance of the emergence of garment exports in the export sector also meant market penetration which in turn influenced the Port's direction of trade.

Table 4.15

Distribution of the Value of Garments and Textiles in the Total Value of Industrial Exports 1981-1995 (in Rs. Million)

YEAR	Total	Value of	Value of	Total	% of the
	Value of	Garments	Textiles	Value of	Total
	Industrial	Exports	Exports	Garments	Value of
	Exports			& Textiles	Exports
				Exports	
n 5.20					
1981	7,455	2,956	24	2980	39.98
1982	8,270	3,443	14	3457	41.80
1983	8,821	4,635	29	4664	52.87
1984	12,917	7,358	80	7438	57.58
1985	14,295	7,700	129	7829	54.76
1986	15,877	9,265	164	9429	59.38
1987	20,004	12,387	172	12,559	62.78
1988	22,674	13,611	159	13,770	60.73
1989	28,469	16,916	111	17,027	59.80
1990	41,570	24,286	96	24,382	58.65
1991	50,735	31,652	238	31,890	62.85
1992	76,696	49,391	555	49,946	65.12
1993	100,420	62,349	1,533	63,882	63.61
1994	116,743	68,944	2,093	71,037	60.84
1995	147,069	N.A.	N.A.	94,946	64.55

(Source: Central Bank of Sri Lanka.)

The Direction of Trade

The success of open economy policy with export promotion as the principal aim depended primarily on market penetration for Sri Lanka's exports. As a matter of fact from the early fifties through bilateral trade agreements first with China and subsequently in the sixties with Middle-East countries efforts were made in this direction. However, as late as by the seventies these efforts had brought very little success by way of market penetration and undermining the dominance of the west

led the U.K. as Sri Lanka's trading partners. In the year 1970, the U.K. alone, for example, accounted for 23% and 14% respectively of Sri Lanka's total value of exports and imports (Central Bank of Sri Lanka 1970).¹⁸

A trend towards the reversal in that position was only seen after 1977 and as mentioned elsewhere it was in the first place, due to the entry of a large number of non-traditional commodities to the list of exports. The demand for many of them came from those other than Sri Lanka's traditional trading partners. The same was true of the many new items that were added to the list of imports. The coming into being of the Fourth Growth Pole' in Asia which became a main supplier of some of Sri Lanka's industrial inputs also a factor responsible for that change.

Finally, the role played by the national carrier, the Ceylon Shipping Corporation (CSC) in some ways with regard to the promotion of non-traditional exports. For nearly a century the carriage of Sri Lanka's exports and imports was the domain of Liner Conferences whose pricing policy and the routes they were serving hampered export promotion as well as the search for lucrative markets. In this, a break through was made by the CSC after its formation in 1970 when it started services to hitherto untouched markets. In addition the Corporation also made extensions to existing services. The operation of services to new areas like the Middle-East, North Africa and the Mediterranean and also the extension of services to a large number of ports were examples of the CSC's efforts to open up new areas for Sri Lankan exports.

The operation of these factors together brought Sri Lanka not only into focus with new trading blocks but also brought about a change in the direction of trade. The U.K. for instance, the country's traditionally important trading partner fell almost into the background by the beginning of the present decade to be replaced by others. In 1991, that country's share of Sri Lanka's exports and imports for instance, was only 6% and 5% respectively. The Sri Lanka - China, Rice-Rubber trade pact made in 1952 though it made a dent in the direction of trade but with the termination of the pact in the 1970s reverted Sri Lanka to the earlier position in trade relations. In 1970, for example, China accounted for 12.6 per cent and 12.5 respectively of Sri Lanka's exports and imports but after the seventies the position gradually changed and by 1991 China's proportion of exports to and imports from Sri Lanka dropped to an insignificant level of 0.2 per cent and 3.3 per cent respectively.

The Soviet Union and the East European Socialist block countries together provided a market for 8.7 per cent of Sri Lanka's exports and supplied 8.0 per cent of Sri Lanka's imports in 1970. However, with the termination of trade agreements and the deepening political crises to which these countries have been subjected to in the eighties drastically dropped their relative shares of Sri Lanka's exports and imports to 1.3 per cent and 1.1 per cent respectively by 1991. Also, Canada and Australia are two other countries that had ceased to be of much significance in the overseas trade of Sri Lanka. Australia purchased 7.6 per cent of all exports and supplied 6.9 per cent of all imports of Sri Lanka in 1970. The position had changed significantly by 1992 and that country accounted for only 1.2 per cent of all exports and 1.2 per cent of all imports. Similarly, Canada's share in Sri Lanka's exports had fallen from 6.3 per cent in 1979 to 1.6 per cent in 1992 while her share of imports dropped to 0.5 per cent in 1992 from 1.8 per cent in 1970 (Central Bank of Sri Lanka).19

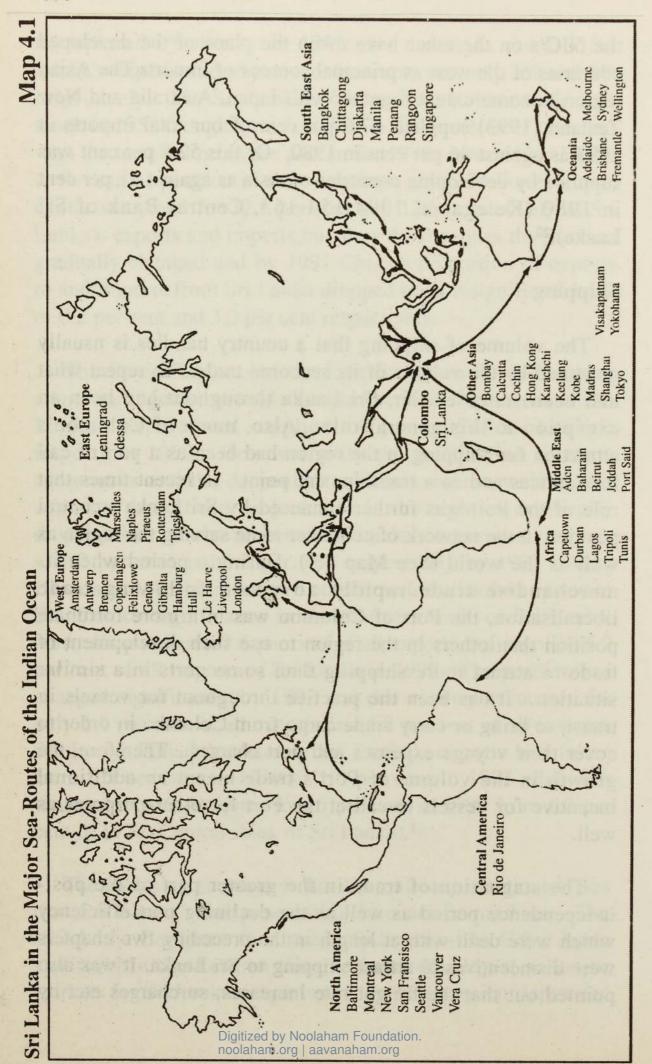
The emerging scenario as has been already mentioned, was that Sri Lanka was penetrating into newer markets. The U.S.A. the European Community (other than the U.K.) Japan and the Middle-East on the one hand developed as major markets for Sri Lankan exports and the Asian region, Japan and

the NIC's on the other have taken the place of the developed countries of the west as principal sources of imports. The Asian region to some extent together with Japan, Australia and New Zealand (1993) supplied 67.6 per cent of our total imports in 1993 as against 36 per cent in 1980. Of this 52.8 per cent was supplied by developing countries of Asia as against 21 per cent in 1980 (Kelegama, 1994 154-163, Central Bank of Sri Lanka).²⁰

Shipping

The volume of shipping that a country handles is usually governed by the volume of its seaborne trade. To repeat what had been stated earlier, Sri Lanka throughout had been an exception to this general rule. Also, much of Colombo's attraction for shipping in the region had been as a port of call for services and as a transhipment point. In recent times that role of the Port was further enhanced by Sri Lanka's central position in the network of container route serving the region as well as the world (See Map 4.1). During a period when its merchandise trade rapidly advanced following trade liberalisation, the Port of Colombo was in a more fortunate position than others in the region to use such development of trade to attract more shipping than some ports in a similar situation. It has been the practice throughout for vessels in transit to bring or carry some cargo from Colombo in order to cover their voyage expenses and port charges. Therefore, the growth in the volume of Port's trade meant an additional incentive for vessels to call at the Port for other purposes as well.

The stagnation of trade in the greater part of the postindependence period as well as the declining port efficiency which were dealt with at length in the preceding two chapters were disincentives to attract shipping to Sri Lanka. It was also pointed out that the freight rate increases, surcharges etc. by



Conference Liners serving Colombo's trades brought adverse effects on the national economy. Yet it must be pointed out that Conference behaviour was in a way had a direct influence in Sri Lanka government's experiment with the promotion of a national carrier for the first time in independent Sri Lanka and promoted some interests of the Port.

Among other things, these practices which were inimical to the country's economic progress strengthened Sri Lanka's argument in favour of the establishment of a national carrier, the result of which was the establishment of a fully state owned CSC in 1971. The objects of the Corporation as specified by the legislation show that the government envisaged a wide scope of activity. The CSC was permitted to operate services for the transport of goods, mails and passengers by sea; to function as shipowners, charterers, ship brokers and shipping agents; and to carry out the building, maintenance, repair and overhaul of vessels. The range of activity as envisaged by the Shipping Corporation Act by itself although did not affect shipping at Colombo, certain government measures, however, had some effect despite the CSC owning a very small fleet.

It is accepted that much of the commercial successes of national carriers of developed and developing countries, at least in the initial phase, was a result of state assistance and protectionist policies. This is more valid in the case of the CSC until recent times as it developed under the shadow of state patronage and protectionist policies (Vangas, 1982, 39).²¹ The greatest stimulus to the CSC came, however, from the government's protectionist policies which were enunciated in two programmes: a cargo reservation policy and Central Freight Booking activities. From the inception of the Shipping Corporation the government directed that all its agencies use only the CSC. Consequently, a variety of bulky cargoes, such as sugar, rice, flour and railway carriages, were handled solely by the national carrier (Dharmasena, 1989).²²

Nevertheless a far more effective and innovative instrument in helping the CSC's existence had been the Central Freight Bureau, established in 1973. The Freight Bureau Law stipulated that the CFB should foster the development of the national merchant fleet on matters such as freight rate surcharges and frequency of services. For the CSC such advantages had been further strengthened by the fact that, Colombo, is the home port of the Corporation's vessels which under the law enabled them to receive full loads in their outward voyages. Their competitors until the liberalisation of shippers in 1991 on the other hand, enjoyed no such protection; for them visits to Colombo have been merely to top up their cargo.

Undoubtedly, the protectionist shipping policy practiced since the early seventies in favour of the national carrier would have to some extent affected the use of the Port by international shipping. But, there were two compensatory factors. growth in the Port's merchandise trade since the early eighties was such that it was beyond the capacity of the CSC's nascent fleet to carry that trade. Secondly, the improved port efficiency was an inducement to use the Port for purposes other than carrying cargo. Besides, the cargo reservation policy affected outward and not inward cargo movements. Thus, the Port witnessed a flow of shipping at a very high level from the early eighties. The ship arrivals at the port which added up to 2,055 in 1980, for example, rose to 2,548 in 1989. With the liberalisation of shipping finally in 1990 adverse effects on ship arrivals at Colombo, if there were any, disappeared thereafter and the Port experienced a sharp increase in ship arrivals. During the six years following trade liberalisation, annual ship arrivals at Colombo averaged at 3,547, whereas in the ten years prior to that the annual average was 2,171. More spectacular, was the growth in the volume of shipping tonnage. In the pretrade liberalisation ten years while the annual average was 22.4 million (GRT), during the subsequent six years the annual average more than doubled to 47.1 million (GRT).

In the eighties and the early nineties, Colombo's shipping both in number and tonnage were thus growing at rates unknown in the post war era. In the absence of any other developed port, the Port of Colombo as usual was called upon to handle almost the entirety of that increasing tonnage of shipping visiting the shores of Sri Lanka. For instance in 1981, 92.7% of the tonnage of shipping that called at Colombo whereas by 1995 its share had risen to 96.8% (see Table 4.16). Together, with such increase in Colombo's share of shipping was the notable change in the purpose for which the Port was used. The low volume of merchandise trade that Colombo handled in the pre 1977 period made a lesser number of vessels to call at the Port to discharge or lift cargo. Before 1978 the vessels that came for such purposes accounted for less than 70% of the total callers at Colombo and the rest between 22 to 36 percent came for bunkering. Thereafter a basic changed had occured whereby the Port of Colombo was becoming less important for bunkering. From the late eighties more than 80% of the vessels that called at Colombo did so to carry or bring cargo. Shipping visiting the Port for bunkering steadily declined and reached the very low figure of 9.4% in 1992 and dropped still further to 6.60% by 1995 (see Table 4.17).

Another significant feature that emerged in Colombo's shipping scene was the changing importance of ships of different nationalities using the Port. It appears that in terms of the number of calls made, the vessels of SAARC member countries (See Tables 4.18 - 4.19) India, Sri Lanka and Maldives were of much importance. But in GRT terms these countries were less significant in comparison with those of the South East and East Asian shipping nations. Among them (See Tables 4.20 - 4.21) China, Japan, Singapore, Philippines, and latterly, Taiwan as a group were making the biggest contribution to Colombo's growing tonnage of shipping from the Asian region. It simply means that like in the case of the import-export trade in shipping too, the Fourth Growth Pole' as

5 stated as a per-centage of

90.57 92.52 93.03 94.48 94.17 96.39

97.29

Table 4.16

Year

ships arrived GRT (000) of in Colombo 19421 20829 24257 23039 32548 32548 32548 40318 40318 18810 Ship arrivals in Sri Lanka and Colombo & their GRT, 1980-1995 Ships arrived in GRT (000) of Sri Lanka 20991 22390 25673 24466 33785 39751 40318 45446 52230 54978 percentage of 2 stated as a 93.90 92.40 90.24 91.78 89.98 86.04 85.65 90.97 92.17 92.16 90.66 No. Arrived in Colombo 2052 2171 2505 2335 2337 2327 2548 2548 2847 3117 ships arrived in Total No of Sri Lanka 2027 2093 2274 2274 2774 2717 2801 3089 3438

(Sources: SLPA, Port statistics, Series iii, viii,x,xi and xvi)

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986 1988 1989 1990 1992

2442440804CCCCCCCCCCCCC

Table 4.17

	Total num	Total number of Ships arrived by pu	arrived by purpose of their visit - Colombo 1973/1995	nbo 1973/1995	
Year	Total	Cargo	%	Bunkering	%
1973	1722	920	53,43	622	36.12
1974	1520	891	58.62	522	34.34
1975	1576	942	59.78	516	32.74
Dic	1668	1924	61.39	519	31.12
zitiz	1658.	1021	61.58	. 518	31.24
81978 81978	1699	1197	70.45	383	22.54
N VC	1888	1247	66.05	489	25.90
lool	2055	1439	70.02	465	22.63
aha	1898	1388	73.13	368	19.39
m F	1890	1319	62.69	324	17.14
our	1934	1513	77.00	318	16.37
ndat	2052	1593	73.7	379	18.47
ion	2171	1751	80.7	335	15.4
1986	3525	2046	81.7	388	15.37
1987	2335	1891	81.00	352	15.07
1988	2327	1936	83.2	315	13.
1989	2548	2186	85.8	287	Ë
1990	2847	2438	85.6	316	Ë
1991	2929	2499	85.3	351	12.0
1992	3117	2737	87.8	292	7.6
1993	3323	2016	99.09	286	8.6
1994	3251	2007	62.43	279	8.58
1995	3271	2074	63.41	216	9.9

(Sources: SLPA, Port statistics, Series iii, viii,x,xi and xvi)

Table 4.18

	Grand Total Colombo	vo «	1890	2505	2548	2929	3323	3251 - 7728
es Calling on Colombo	Sri Lankan No. %	63 3.1	107 6.3	352 14.05 377	15.0 216 8.48	218 7.66 237	8.09 249 7.99 238	10.17 194 5.97 162 4.94
No. and Percentage of the Nationality of Vessels of SAARC Member Countries Calling on Colombo 1980-1995 (selected years)	Maldivean No. %	112 0.8	69 3.7	4.35	5.01 63 2.41	65 2.28 83	2.83 68 2.18 24030	33785
ality of Vessels of SAARC Me 1980-1995 (selected years)	Bangladeshi No. %	22 1.1 15	0.8 0.8	1.00	33 0.81	16 0.56 29	22 0.71 17	0.51
centage of the Nation	Pakistani No. %	45 2.2	22 1.6		32 1.46	22 1.02	37 0.73	0.51
No. and Per	Indian No. %	170 8.3 165 .	8.7 183 9.7		108 4.24	121 4.25 104 3.55	3.34	72 2.21 81 2.47
	Year	1980	1982	1987	1989	1991	1992	1994

(Sources: SLPA, Port statistics, Series iii, viii, x, xi and xvi)

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Table 4.19

mbo	Grand Total	Colombo	GRT. %	17954		17038		17966		24257		22330		32550		38873		40318		43318		50611	•	50278	•	55992	
ntries calling on Colo	Sri Lankan	GRT. %		402	2.2	362	2.1	648	3.6	1763	7.27	1223	5.48	829	2.55	637	1.64	652	1.62	569	1.29	581	1.15	474	68.0	490	0.88
GRT (000) and percentage of the nationality of Vessels of SAARC Member Countries calling on Colombo 1980-1995 (selected years)	Maldivean	GRT. %		256	1.4	132	8.0	146	8.0	51	0.21	58	0.26	36	0.11	21	0.05	50	0.12	30	0.07	115	0.23	232	0.44	285	0.51
tionality of Vessels of SAARC 1980-1995 (selected years)	Bangladeshi	GRT. %		140	8.0	104	9.0	147	8.0	220	16.0	255	1.14	268	0.82	138	0.36	221	0.55	190	0.43	127	0.25	121	0.23	STATISTICS OF STATISTICS IN	
percentage of the na	Pakistani	GRT. %		339	1.9	274	1.6	205		409	2.02	374	1.67	350	7.08	330	0.85	261	9.02	433	86.0	189	0.37	147	0.28		•
GRT (000) and	Indian	GRT. %		1574	8.8	. 1882	11.1	1775	6.6	1723	7.10	163	5.21	1062	3.26	1839	4.73	1585	3.93	1398	3.18	1282	2.53	1282	2.41		
	Year			1980		1861		1982		9861		1987		6861		1990		1661		1992		1993		1994		1995	

(Sources: SLPA, Port statistics, Series iii, viii, x,xi and xvi)

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Table 4.20

No. and percentage of the nationality of major shipping nations of East and South East Region calling on Colombo 1980-1995 (selected years)

Taiwanese Singaporean Hong Kong Malaysian Indonesian Philippino Grand	No. % No. % No. % No. % No. % No. %	- 163 05 09 2055	7.9 - 0.2 0.4	- 02 06 18	- 7.9 - 0.1 0.3 0.9	- 175 - 03 01 26	- 9.2 · - 0.2 0.1 1.4	14 14 03 21	- 4.27 0.56 0.5 0.12 0.8	05 03 07 26	4.1 0.21 0.1 0.30 1.1	07 11 05 45	2.3 3.6 0.27 0.4 0.20 1.7	56 113 16 15 1 38	1.9 3.9 0.5 0.5 0.04 1.3	104 166 14 04 - 26	3.5 3.6 0.1 0.1 - 0.8	55 218 09 12	1.7 6.9 0,2 0.3	86 291 48	2.58 8.75 1.44 - 0.72	82 284	2.52 8.73 - 0.49 - 0.92	31 - 52	2.31 8.26 0.94 1.58
Japanese Taiwa	No. % No.	105 -	5.1	- 101	5.3	- 89	3.6	55	2.2	55	2.3	31 60	1.2		6.0		0.5		3.9	98	1.02		0.71	11 76	0.33
orea Chinese	% No. %	16	- 0.8	33	1.4 1.7	28	0.4 1.5	31	1.4 1.2	33	2.1 1.4	128	0.3 3.02	175	0.2 0.6	94	0.9 3.2	156	0.7 3.0	110	0.87 3.31	25	2.4 2.58	94	2.89 2.89
Year South Korea	No.	1980 -		1981 26	Dig	2861 gitiz	ed	₹ 1986 36	Noo	49	nam	01 6861 10	oun	70 0661 dat		23		1992 23		1993 29		1994 79		1995 95	2

(Sources: SLPA, Port statistics, Series iii, viii,x,xi and xvi)

Table 4.21

GRT (000) and percentage of the nationality of major shipping nations of East and South East Region calling on Colombo 1980-1995 (selected years)

	Grand	Colombo GRT. %	,	1898	- 0081	- 0001	24257	22330		23091	32548	-	38673	40318	43004	-	50611	53278	01766	55992
	Philippino	GRT. %	51	0.3	7.0	1.1	325		1.73	1.99	727	2.23	171	438	0.09	0.47	391	0.77	0.87	690
	Indonesian	GRT. %	48	33 0.3		0.0	22 0.09		0.27		33		04		. 09	0.14				UK.
	Malaysian	GRT. %	q q els	. 90	0.0	0.1	52 0.21		0.05	32 0.14		0.59	41 011	32	0.08	ab at ti		- 821	0.33	
Colonino 1700-1775 (selected jeals)	Hong Kong	GRT. %	ant ren		0.0	0.1			0.36	0.42		0.41			0.70	1.04	792	1.56	0.84	491 0.88
200 100 100	Singaporean H	%			9.9	7.4	3 38		3.36	4.08		3.92	4.46		97.9	6.94		89.6	99.6	8.22
canning on coloni		% GRT.	940	- 1117	7 1336			862		941			3.49 1723	2733	3054		4901	6.0		4.6
	Taiwanese	% GRT.	0,2	3.6	4.1	3.7	- 65		22	, LI	2256		2155	3878	2054	1007	3033	2007	1077	2575
	Japanese	GRT.	159	702	659		653	718		477	889	2.10	665	499	036		286	787	1.47	285
	Chinese	GRT. %	104	268 0.6	1.6	. 1.1	311	303	1.36	413	4027	2.37	48/5	2266	29.5	10.38	3191	6.30	5.21	Luni shai cour
	orea	%		10	0.7	0.4	1.92		3.70	3.79		0.53	0.16		0.60	0.40		0.92	4.58	5.55
	Year South Korea	GRT.		123	99	3	466	827	1	9/8	271	,	63	240	175		495	CAAC	74.7	3106
	Year		1980	1861	Digitiz oolah	ed b	986 Nocorg	286 olah aava	am*	Founham.	686 date	ion.	1990	1661	1007	7001	1993	1007	+661	1995

a group of countries has come to play a more prominent role than the SAARC member countries.

In the final analysis, however, the countries that contributed overwhelmingly to the spectacular growth in the tonnage of shipping that the Port of Colombo was handling from the early eighties were those from outside the Asian region (see Tables 4.22-4.23). On account of Sri Lanka's colonial links with the UK in the past the dominance of that country in the Port's total tonnage of shipping remained even long after independence. But with trade liberalisation a reversal had taken place and by 1995 when Colombo's shipping tonnage had rise to 55,992,000 (grt) from 17,954,000 (grt) in 1980 UK's share was 2.7% compared with 6.6% in the latter year. In its place the countries that had emerged in the Colombo's shipping scene by the mid nineties were the USA, Russia, United Germany, Greece, Cyprus, Siberia and Panama. It was not surprising however, that because of the relatively high service level and the facilities available that for the first time the Open Registry countries had been the biggest contributors to the Port's growing tonnage of shipping. In percentage terms those countries together accounted for 17.9 and 25.7 respectively of Colombo's total shipping tonnage in 1980 and 1995. Whereas in 1995 the combined share of other western shipping nations, the US, Cyprus, Greece and United Germany was only 14.5%.

Regardless of the share of each of the western countries in the total shipping tonnage that Colombo handled these countries together introduced a new element to the arena of Sri Lanka's shipping which in turn brought about a fundamental change in the activities of the Port of Colombo. These countries with which the trade links were established in the post-liberalisation period and the nationality of vessels with which the trade links were established were of those countries that were keeping abreast of advances in maritime technology. Consequently, what appeared to be an uphill task for the newly

created port administration, the SLPA, was to prepare the Port of Colombo to meet the challenges of those advances in maritime transportation that was superimposed on it from the developed world. That among many other factors was to be an effective instrument to make Sri Lanka's trade liberation policy a success.

Country	1980 No. %	1981 No. %	1982 No. %	1986 No. %	1987 No. %	1989 No. %	1990 No. %	1991 No. %	1992 No. %	No.	88	1994 No.	28	1995 No. %
American	101	92 4.8	81	100	66 2.63	101	3.90	91	3.56	662	1.86	19	2.06	5 1.98
British	106	68	69	02	54	41	24	20	40	38		46		55
E IN	5.2	4.7	3.6	2.79	2.31	19.1	0.84	0.68	1.28	-	1.14		.41	1.68
Cypriot	90	13	07	83	75	172	6/	87	116	166		185	=	163
	0.3	0.7	0.4	3.31	3.21	6.75	2.77	2.97	3.72	-	5.0		69.5	1.97
Danish	80	15	11	901	56	87	75	09	92	06		100	51	1
	0.4	8.0	9.0	4.23	4.07	3.41	2.63	2.05	2.95	15	2.70		3.07	1.55
Dutch	09	39	30	27	38	47	58	46	30	30		91	17	7
	2.9	2.1	1.6	1.08	1.63	1.84	2.04	1.57	96.0		06.0		0.49	0.52
French	35	30	27	03	05	90	10	19	24	25		17	91	9
	1.7	1.6	1.4	0.12	0.21	0.24	0.34	0.65	77.0	1	0.75	•	0.52	0.48
Greek	250	194	135	81	72	55	57	57	47	19		62	73	3
	12.2	10.2	7.1	3.23	3.08	2.16	0.95	1.95	1.51		1.83		16.1	2.22
Iraqi	21	14	16	10	0.5	60	90	1	1	1		,	1	
*	1.0	0.7	8.0	0.40	0.21	0.35	0.21	-	1		1		1	1
Italian	28	80	01	10	40	02	07	07	8	1		28	14	4
	1.4	0.4	0.1	0.04	0.17	80.0	0.25	0.24	0.13				98.0	0.43
Liberian	98	100	107	120	118	122	126	93	63	139		125	-	186
	4.2	5.3	5.7	4.79	5.05	4.79	4.43	3.18	2.02	2	4.18		3.84	2.67
Norwegian	51	36	20	28	05	13	95	41	26	26		15	21	
	2.5	1.9	1.1	1.12	0.21	0.51	1.97	1.40	0.83	2	0.78		0.46	0.64
Panamanian	287	279	365	407	340	350	408	449	464	471		518	4	474
	14.0	14.7	19.3	16.25	14.56	13.14	14.33	15.26	14.85	2	14.1	-	5.93	14.46
Polish	17	22	30	24	21	37	46	32	22	1		1	•	
	8.0	1.2	1.6	96.0	06:0	1.45	1.62	1.09	0.71				:	1
Russian	84	45	50	75	79	32	46	49	113	110		121	16	-
	4.1	2.4	2.6	2.99	3.38	1.26	1.62	1.67	3.63		3.31		3.72	2.7
West German	69	57	80	150	139	311	359	342	223	161		112	5	96
	3.4	3.0	4.2	6.15	5.95	12.21	12.61	11.68	7.15	5	5.75		3.45	29
Yugoslavian	4	41	54	30	27	28	23	24	03	1		1	1	
	2.1	2.2	2.9	1.20	1.16	1.10	0.81	0.82	01.0	0	1		1	1
Total Colombo	2055	1898	1890	2505	2335	2548	2847	2999	3117	3323		3251	3	3277

(Sources SLPA, Port statistics, Series iii, viii,x,xi and xvi)

GRT and percentage of the nationality of Vessels of major shipping nations other than Asian Calling at Colombo 1980-1995 (Selected Years)

	_	11					-		Г			311		-		34							-		_			7	21	-3				
1995 GRT. %	2540	4.5	1529	2.7	1735	3.0	-	1.1	3	9.0	5	60.0	1242	2.2	7	1	12	8.0	4882	8.5	6	6.0	9636	1.72		1	0	1.3	2718	4.8		:	55992	1
	25	-	1.5	5.89	17	2.85	651	1.35	363	0.51	525	080	12	2.13	1	1	467	19.0	48	6.72	539	0.62	8	16.21	1		750	2.18	27	5.48	1	1	55	
1994 GRT. %	2615	4.91	1542	2.	1523	2	724	-	271	0	428	0	1136	2	. 3		859	0	3581	9	331	0	8636	16		1	1911	2.	2921	5			53278	
% C. 13	72	06.9		2.24	1.1	3.16	7.	1.20	2	1.07	4	1.19	=	2.26	1	!	80	1	3.	7.30	3.	88.0	8	14.28	1	-	_	1.81	25	5.42	1	1	5.	1
1993 GRT. 9	3497			2	1600	3	809	-	543		604	1	1147	2				91	3696	7	441	0	7227	1		13	916	-	2746	5			50611	
	8	9.34	1135	1.21	=	2.78	9	80	-	09'1		4	=	1.79	1	1	1	91.0	36	2.80	4	1.08	77	10	1	0.65	16	175	27	55	1	1	2(1
1992 GRT .%	4110	9.	534	-	1224	2.	871	1.98	703	1.	635	1.44	789	1.	1		71	0.	1233	2.	476	1.	6203	14.10	284	0.	772	17	2485	5.65	42	0.1	43994	
% :		8.47		3.90		2.22	- Air	2.15		1.67		1.73		2.37	73	1		0.27		3.46		1.52	99	14.68		1.12	H	1.16		8.18	ài	0.58	8	1
GRT.	3401		363		890		998		752		575		835		-		101	105	1394		613		8169		451		466		3299		233		40318	
U. %	6	10.65	-	0.82		1.99		1.20		2.14		0.5		2.17		0.07		0.18	7	4.10		1.31	9	11.75		1.86		1.51	2	8.71		0.54	73	1
GRT.	4119		317		770		464		829		222		837		27		70		1587		909		4546		721		587		3392		209		38673	
GRT. %	05	11.52		2.22	87	4.69		0.75	15	1.77		.0.17	1	2.36		0.11		90.0)5	5.55	1	0.57	22	12.36	9	1.86	5	1.25	32	8.55	•	0.82	32550	1
GRT	3750		391		1528		245		575		46		767		35		19		1805		187		4022		605		406		2782		269		325	
%		6.17		2.80		4.04		0.85		1.76		0.43		4.65		60.0		0.018		6.95		0.47		14.68		0.92		3.61		7.47		1.27	0	1
GRT.	1377		625		902		289		393		95		1039		21		41		1551		104		3278		204		807		1667		283		22330	
%		7.48		4.02		4.63		86.0		1.41		0.18		4.43		0.19		0.07		19.9		2.54		12.99		0.95		3.26		7.30	N	1.01		1
GRT.	1815		926		1136	-	238		342	-	4		1761		46		18		1604	9	615		3151		231		162		1771		244	91	24257	
1%		9.01		9.6		0.3		0.2		1.9		1.9		8.6		0.3		0.0		9.9		2.0		15.7	1	1.5		2.4		4.4		2.1		1
GRT.	1907	1	1000		28		4		349		350		1765		50		07		1191		367	8	2825		274		435	E E	782	10	386		17966	
% :		11.4	_ ;	6.3		9.0		0.1		2.4		2.4		15.6		0.3		0.5		5.9		3.1		9.7		4.1		2.2		2.8		1.7	000	1
GRT.	1940		1071		110		19		412		405		2658		28		84		1002		532		1991	6	231		374		485	75.70	293		17038	
%		10.3		0.0		0.3		0.5		2.5		2.4	M	16.3		6.0		1.3		5.7		3.2		12.2		0.7		2.9		4.8		6.1	+	,
GRT.	1849		1182		46	37	87		456		427		2925		164	- 1	229		1017		268	31	2183	-	121		528		998		348		17954	
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3	ican		_		ot	6	ч				-						_		an		egian		Panamanian				III	*	West German		Yugoslavian		Total Colombo	
	American		British		Cypriot		Danish		Dutch		French		Greek		Iraqi		Italian		Liberian		Norwegian		Panan		Polish		Russian		West (Yugos		Total (

(Sources SLPA, Port statistics, Series iii, viii, x,xi and xvi)

Chapter V

Development of Port Containerisation

The unprecedented growth in Colombo's trade and shipping that was brought about by trade liberalization called for the improvement of port facilities. However, the facilities demanded by that growing trade and shipping were of a different type and, hence, was not a question of expanding the cargo handling facilities then in use catering to the needs of labour intensive conventional type in the use for nearly a century. Simultaneously with Colombo's fast growing volume of cargo and the tonnage of shipping was the superimposition in the region of the container revolution that was taking place in the West. For survival as a port serving international shipping, it was unavoidable for Colombo to prepare itself to meet the challenges of containerisation.

Containerisation which simply means the substitution of mechanical power in place of muscular power in cargo handling operations, could not possibly be ignored by Colombo partly because it was already becoming established as a mode of transportation and partly because of its inherent advantages. Among other things, contents of containers do not suffer from loss or damage and are separable from means of transport in order to facilitate transhipping without handling the contents, increased berth throughput, reduction in waiting time and fast turn round of ships. Despite these seemingly great advantages containerisation in Sri Lanka progressed initially at a slow pace.

The drive towards containerisation was fuelled by the west and many a developing country was in a state of unpreparedness to accept the innovation. There was also the fear of large scale labour redundancies in the switch to container handling from manual handling of cargoes which the west had already experienced. A country like Sri Lanka with widespread unemployment among the unskilled labour had to give serious thought to that problem.

Far more important had been meeting the demands of containerisation embracing a wider spectrum such as the cargo itself, the ships, the port, the inland carriers etc. which involved several issues the most important being the need for large scale capital investments at a time when Sri Lanka was going through a period of severe financial crisis. In that context it was an unfortunate coincidence for the country that the initial phase of Colombo's transition from conventional cargo handling to intermodalism was sparked off by strong escalation of capital costs brought about by the world energy crisis. To illustrate the seriousness of the problem of capital for a developing country like Sri Lanka UNCTAD provided the following typical examples of the capital equipment cost increases in the 1970s.

- (a) In 1970 the required investment in a conventional break-bulk was estimated at US \$ 2,240,000 but in 1975 a similar facility was estimated to cost US \$ 5,091,000 amounting to a cost increase of 110 per cent.
- (b) In 1970 the required investment in a container lifton/lift-off, roll on/roll off/berth was estimated at US \$ 6,038,000 whereas in 1975 the same was estimated to cost US \$ 14,434,000 which represented an increase of 139 per cent(UNCTAD, 1977-32).1

A major cause for the escalation in the cost of providing any type of berthing facility was found in the inflationary trend of developed market economies some of which continued to be the main sources of capital equipment goods for port development in the country.

Quite independent of the problem of capital, Sri Lanka, in the march to containerisation was also disadvantaged by the attitude of Liner Conferences serving Sri Lanka's trade. Despite the advantage that most of Sri Lanka's exports were containerisable, there had been a marked reluctance of deepwater carriers to move towards containerisation. Tea, which bulked the country's export sector was a typical example of this attitude. The disinclination of the majority of liners engaged in Sri Lanka's trade to go for containerisation was attributed to:

- (a) The distribution infra-structure, according to them, did not permit door to door containerisation and national railways were not equipped to carry container boxes;
- (b) Lack of sufficient foreign exchange reserves to invest in container hardware;
- (c) Abundant supply of cheap dock labour available for conventional cargo handling.
- (d) Communications were poor and control of containers would be difficult; and
- (e) Large-scale containerisation of tea exports would result in considerably higher freight rates (Containerisation International, 1978-43).²

Similarly, the rationalised pooling system practised by the Shipping Conferences seemed to have prevented the liners moving speedily towards containerisation of Sri Lanka's import and export trades. These pools covered the various geographical areas of Shipping Conferences and there was a recognition of the national as well as historical interests. To cope with what was essentially a fluctuating pattern of demand the liners generally deployed specific vessels to the trade. This in effect meant that the liners did not have any container carrying capacity. Even as late as 1978, the West Germany's

Hansa Line, for example, was able to carry only 50 TEUs per ship serving the trades of this region while the British carrier P & O Strath Services reportedly had still a lower figure of 25 TEUs per vessel (Ibid., October 1978-17).³

These were no doubt problems that all developing countries in the region were baffled with when advanced maritime technology in the west was thrust on them. In overcoming these problems in a relatively short period of time Sri Lanka, nevertheless has a unique record in the South Asian region. The purpose of this discussion, therefore, is to analyse port development in Colombo from 1978 to 1995 with the emphasis on containerisation that helped its elevation to a pivotal position in South Asia in the eighties.

Container Facilities - The Early Phase

In the mid sixties, the Colombo Port Commission (CPC) planned to construct a bulk handling berth by extending the QEQ, one of the important deep water berths the reason for which as referred to earlier was to receive vessels of large size. But rethinking on the proposed plan had to be done in view of the container revolution that was taking place in the West and which had begun to change the pattern of world shipping. The CPC hence recognised the need to construct a container berth to meet the challenges of oncoming change in maritime technology. Consequently, in 1966 the then government changed the idea and decided, instead, to construct a container terminal. But, as the country was going through a major foreign exchange crisis there was curtailment of projects in all sectors and priority was given only for more important ones. Port development received lower priority, obviously because of the steady drop in the cargo handled at the Port.

Regardless, the CPC continued the construction work on the new quay designed for container handling. The project consisted of a tied-back concrete cylinder quay wall 300 metres long with a depth of 12.8 metres and a back up area of 3.2 hectares. Since the scheme was financed totally out of meagre port funds the progress was so slow that by 1977 only 180 metres of the 300 metres of the quay wall saw completion. However, it is to the credit of the CPC that investigations, design, planning and execution of the scheme was carried out by a very limited cadre of local engineers and supporting staff in the Port without any foreign exchange component and with local consultants and contractors.

With trade liberalisation coupled with massive investments on lead projects, transport infrastructure development inevitably received higher priority than before. The improvement in the country's financial position and the flow of foreign development aid, on the other hand, made improvements in the transport infra-structure a possibility which enabled the remainder of the 300 metre quay length to be completed in three years in 1980. The cost of the whole project by that year had aggregated to Rs. 33 million. The terminal was inaugurated on the 1st of August 1980 and bears testimony to the infant SLPA's enthusiasm, the potential to cater to containerization and the financial resourcefulness that replaced the CPC in 1979 (Dharmasena, 1987-7).4

Thus, it was nothing but the signs of rapidly growing container traffic at Colombo that led the new government to expedite the completion of the terminal. Containers were first introduced to Colombo in December 1973 when the American president Lines (APL) brought containers in their "on board gantry" vessels. They also brought their own prime movers and trailers so that container operations were purely trailer mounted with the Port having to demount. This was the initial break-through for Colombo, which handled around 200 TEUs per month on the conventional quays. Some other shipping lines also followed suit and began bringing the containers in

their conventional vessels to be handled by ships' gear. The TEUs handled by Colombo that were 8,540 in 1978 rose to 17,680 in 1979, and rose to the record level of 41,672 in 1980 signallying the future trend in the Port's container throughput (Port of Colombo, Hand Book 1985).⁵

In order to facilitate the container traffic growing in that fashion it became inevitable that the turnround time of container vessels had to be improved. As an ad hoc measure the employment of mobile construction cranes and even trackmounted quarry cranes at the water front to load and unload containers, therefore was begun. Using such meagre back-up support, it was claimed that the turnround time of container vessels was quicker in Colombo than in the neighbouring ports. So much so that Colombo soon proved its capability to serve as a transfer point for the ports in the Persian Gulf, Pakistan, India, Bangladesh and East Africa.

As a long term measure to improve turnround time of container vessels, the SLPA invested Rs. 400 million of its own funds in the year 1980 to 1982 on new cargo handling equipment such as shifters for movement and stacking of containers, 40 ton and 25 ton forklift trucks for handling containers, and small fork lift trucks for stuffing and destuffing of containers, and berthing and towing tugs. Apart from helping to reduce the turnround time of vessels, these investments also did help in the systematic stacking of cargo in transit sheds and the expeditious clearing of cargo by consignees.

The acceleration in the Port's container traffic with trade liberalisation was also paralleled by an equally impressive growth in the transhipment trade. Between 1979 and 1983, for instance, 40% of the total containers consisted of transhipment cargo. To meet the demands of this branch of trade the Port invested a sum of Rs. 140 million again of its own funds to

purchase and install in 1983 two Leighbre Gantry Cranes 35 tons capacity for lifting 40 ft. containers at 115 ft. at the container quay. Also to handle the "gearless" container vessels that commenced arriving at Colombo with transhipment containers a quick decision was taken in 1982 to remove the 500 ft. x 125 ft. transit shed at QEQ No. 4 to install a temporary "Tango 80" Gantry Crane on a hire basis as a matter of priority.

Since the QEQ container quay had almost reached its saturation point it was decided to limit that for handling "gearless" container ships and shift self sustained container ships, (ships having their own gear) as far as possible, to other areas of the Port. This was achieved by deviating the Graving Dock road to the northern perimeter of the Port.

At the same time the approaches to the South Pier of the Port was cleared of buildings and all available land paved. Thereafter, self sustained ships were berthed alongside that pier and containers were transferred by trailers to other areas where stacking was possible. Destuffing of containers was carried out at the Prince Vijaya Quay Repository Warehouse (Fonseka, Daily News, August 1, 1984).6

These, inevitably were taken as measures of urgency to meet the prevailing situation arising from the sudden increase in container traffic at Colombo by the late seventies. But as intermodalism unquestionably was destined to be the future mode of oceas transportation, Sri Lanka for survival as an import-export economy as well as a centre for shipping in the Indian Ocean had to do much more to meet the challenges of the new development in ocean transportation. That, was a difficult task as it involved feasibility studies, traffic projections, long term planning and, above all heavy capital investments. As things were these could not possibly be undertaken by the SLPA which was a recent creation. The Authority came into existence by the amalgamation of two Public Corporations and

one Government Department, with a total cadre of over 22,000 personnel. Although a step in the correct direction no plan for the amalgamation had been done in advance. Consequently, the Authority's time was spent in the balance period of 1979 and 1980 in effecting a merger without causing disruption to the smooth functioning of the Port which, during this period experienced the heaviest cargo movement brought about by the growth in the volume of trade and also at a time when a number of heavy investment projects were being launched. Moreover, the organisational financial structure had to be established before any major planning for the future could be undertaken. Fortunately, the Authority was relieved of that responsibility as the government of Sri Lanka already had in mid 1979 invited the Japanese International Co-operation Agency (JICA) to carry out studies and make proposals to be implemented to cope with the increasing container traffic and cargo at Colombo (The Corporate Plan 1981-1985, SLPA).7 In March of the following year the JICA formulated what is known as the Master Plan the first ever major port development programme for implementation after 1875.

The Master Plan - 1980

Although there had been a radical shift in trade policy when the the JICA team of experts undertook the preparation of the Master Plan, a national economic plan was not yet being formulated. Hence, as stated in the case of cargo traffic forecast, the team of experts admitted their difficulty of forecasting the cargo throughout accurately as that was closely related to the nations economic activities. True that the future cargo flows from ports are forecast macroscopically, using the correlation between the port's cargo traffic and some specific economic indicators of past years this approach became inapplicable in the case of Sri Lanka. That was because of the momentum of economic changes taking place during the preceeding two years. This situation had led the experts to

forecast the total volume of cargo based on the forecast for each of the main commodities. The forecast for each commodity, on the otherhand, was based on future demand and supply situations. Thereafter, the total volume had been apportioned to each port in the country in consideration of their functions and service areas. For all practical purposes, the Port of Colombo was assumed to be the only port for Sri Lanka's international trade. The validity of the contention being that except wheat allocated to Trincomalee, as in the past, almost all of Sri Lanka's foreign trade as repeatedly stated in the study passed through Colombo. Taking such factors into consideration, the JICA made a comprehensive cargo traffic forecast (see Table 5.1) for the years 1983 and 1988, the latter being the target year for the completion of the Master Plan for Colombo. In that, it must, however, be noted that although the provision of container facilities was the central issue at the Port the expected growth in the volume of general cargo was not overlooked in view of trade liberalisation. As per table the projected growth of such cargo was estimated at 6,178,000 tons and 7,681,000 tons respectively for the years 1983 and 1988 of which it was anticipated that 899,000 tons in 1983 and 2,398,000 tons in 1988 would be containerised cargo. These projected volumes of cargo, according to the report, were exclusively of the transhipment container cargo reckoned at 245,000 tons and 408,000 tons for the years 1983 and 1988 respectively.

The cargo traffic forecast also gave an insight into the demand for containers at the Port and accordingly it was expected to increase to 1,144,000 tons (approximately 80,000 TEU) in 1988 including transhipment containers. However, these forecasts were made on the assumption that sufficient container handling facilities and equipment would be made available. The provision of these facilities, it was observed, was of vital importance largely because of the fact that the containerisation of sea transport in the developing countries

Table 5.1
Traffic Forecast of the Port of Colombo

(Unit: Thousand Tons)

		b	Con- tainer	sen: oga		No.		S/S -dg	o de la	to b	3 3	(2,398)				(2,398)	
		1988	1983/	FERN		C VI		218			gei	1,558			1 839	1,661	
	Total	3	Total Total					930 930				4,573			3 108	7,681	
		111	Con- tainer							i s	1567 8603	(668)			13	(668)	
		1983	1983/							3911		1,128			1 695	1,336	
			Total	qie				ME I	15	9d	ion	3,313			2865	6,178	
		1978	Total									2935			1690	4625	
			Con- tainer								(928)	(928)				(928)	
		1988	Total	999		371	100	,	380	461	1272	2584	03.00	253	2985	5569	
The same of the	Import		Con- tainer						t	1	(339)	(339)				(339)	-
		1983	Total	J.S	55	320*1	127	75	75	370	988	1,908	0300	00007	2 751	4,659	-
		1978	Total		141	538	157	,	1	435	624	1895	2000	175		3478	
		Items		Dry Cargo	Rice	Flour	Sugar	Wheat	Cement	Fertilizer	General Cargo	Sub Total	wer Cargo:	Dofing Oil	Sub Total	Grand Total:	
			Con- tainer	lan Lili				(1470)			(1470)					(1470)	1
		1988	Total		575	148	09	225	40	941	1989		00	1*10	173	2112	1
			Con- tainer					(095)			(260)					(260)	
		1983	Total	TIE	517	146	50	172	31	489	1405		00	04.1		1519	
	Export	1978	Total		464	141	38	132	11	254	1040*2			0443	-	1147	
		Items		Dry Cage Gr	Teal	Rumber	Cogogut	Coeogut Fibero	Cogogut oil (InaDaum)	General General General	Sub	;	wet Cargo:	Defend oil	Sub Total	Grand Total:	

*1 Includes Local transport.

^{*2}Excludes export of rice (10,000) tons)

^{*3}Excludes export of refined oil (162, 000 tons)

²⁾ Transship container (245,000 tons 1983 and 408,000 tons for 1988) is excluded in the Table

was passing through the second stage whereas the developed countries had already passed through that stage. In many ports of Asia, Middle East and Africa, on the otherhand, container berths capable of handling full container vessels had been or were being constructed, and the movement of containers to and from these ports was rapidly increasing. Despite limited facilities for container handling, Colombo, at this time was witnessing a rapid increase in container throughput and the demand for containers was also rising. In the circumstances, to cope with the growing demand for containers and also to keep pace with the progress of containerisation, the construction and arrangement of container berths and equipping them with handling equipment was considered urgent.

Oil Imports and Exports

The trade in crude and refined oil that bulked the wet cargo trade at the Port of Colombo also received special consideration by the JICA. This was particularly, because the facilities were of a different kind to be provided to handle a highly inflammable type of cargo. The quantities of crude and refined oil planned to be imported and exported by the Ceylon Petroleum Corporation are shown in Table 5.2. On the assumption that tankers carry 30,000 tons of crude oil and 20,000 tons of refined oil, the number of tankers required to transport the projected volume of cargo was extimated at 78 tankers for crude oil and 43 tankers for others totalling to 121 tankers by 1990. It involved the deployment of double the number of tankers in that year compared with those engaged in 1980 (JICA 1980-186).8

Irrespective of the target year for the completion of the port development programme certain guide lines were set out to be followed in view of the nature, type and the volumes of cargoes to be handed. These guide lines which are summarised below show that the main emphasis was on improved Port operations to meet the demands of containerisation.

Table 5.2
Planned Oil Imports & Exports - 1980 - 1988
(Thousand MT)

YEAR	Crude	Fuel	Chemical	Refined Oil 1980
			eremonate project	
1980	2330	*263	30	293
1981	2350	*243	30	286.6
1982	2350	*220	30	431.5
1983	2350	371	30	401
1984	2350	398	30	428
1985	2350	428	30	458
1986	2350	462	30	492
1987	2350	499	30	529
1988	2350	518	30	635.2
1989	2350	537	30	731.2
1990	2350	537	30	860.1

^{*} Fuil Oil Export

(Source: Ceylon Petroleum Corporation)

i. The future increases in the cargo traffic, together with a reduction of existing and anticipated port congestion, shall be met by raising the cargo handling productivity through modernisation and by constructing additional berthing facilities.

For crude oil import, the necessary expansion of the facilities shall be considered corresponding to the expansion of the existing oil refinery.

ii. An urgent demand for containerisation shall be met by providing container berths through the modification of existing berths and through the construction of new container terminals.

- iii. A more effective and adequate land use shall be considered.iv. The existing road network shall be improved, to increase road transport capacity and to ensure proper interacting of port and city road plans.
- v. The prevalent safety problem, involving the existing Oil Dock and midstream berths shall be reduced.
- vi. An urgent requirement for the expansion of large vessel repair facilities shall be considered. The need consists of two proposals, to construct a dry dock, and to modify existing cargo handling berths to ship repair berths (Ibid 165).9

Conventional Berths

With these as the main guide lines, the Master Plan envisaged the provision of a series of port facilities, of which those that demanded urgent attention were conventional berths, container berths and the oil berth. Regarding conventional berths it was suggested that in view of the fact that the North Guide Pier (NGP) was to be transferred to Colombo Dock Yards Ltd., one alongside berth, for conventional cargo handling with a water depth of 12 m. and length of 250 m. was proposed to be built in the Korteboam Quay (KQ) that was scheduled to be constructed by the end of 1983. In addition, after the removal of the Oil Dock, two alongside berths, for bulk cargo handling with a water depth of 9 m. and a length of 165 m. each were to be constructed in the North Pier. The whole Guide Pier, on the otherhand, including the South Pier was to be modified into ship repair berths by 1988. Besides, the berth at the QEQ No. 05 was proposed to be converted into a conventional berth subject to the progress of containerisation and the demand for containers when the KQ was constructed.

Container Berths

Nevertheless, in the implementation of the port development programme highest priority was to be given for the provision of container facilities. As a first step the 200 m. extended part of the QEQ was hence planned for a container berth and the crane foundations and other civil engineering works were to be completed by 1981. Regarding full container berths, a new quay (KQ) with three full size container berths was suggested in front of the existing coaling jetties. The expansion of the whole QEQ to provide sufficient back up yard was considered not feasible on the results of sub soil tests carried under the JICA study. The KQ consisting of three full size berths with a water depth of 12 m. and a length of 300 m. was to be completed by the end of 1987. The northern most container berth, on the otherhand, was to be made operative by the end of 1983 together with the 250 m. second berth which was temporarily to be used for conventional cargo handling.

Oil Berth

The existing oil handling facilities, were considered insufficient and would lead to congestion by 1990 with the projected increase in the Port's handling of oil. It was estimated that the Port would be called upon to handle 235,000 tons of crude oil and 900,000 tons of refined oil by that year. Apart from increasing the capacity to handle this amount of wet cargo, the facilities available adjacent to the dock yard, work shop etc., in the opinion of the JICA, were best to be moved to a safer location. Other than safety, the transfer of oil facilities to another location, it was considered, would also provide space for the expansion of other port functions. Finally, if large tankers could be received, the economic effect of the reduction of transport costs was considered as an advantage.

Before arriving at a final decision as to the relocation of the oil facilities, the JICA had the foresignt to consider the merits and demerits of earlier studies on the subject by NEDECO, ADB and the IMCO (Report on the Operations and the Development of the Port of Colombo and certain outports of Ceylon, NEDECO, 1961; Appraisal of Colombo Port Tanker Berth Project Ceylon, Asian Development Bank 1970; and Mission Report, United Nations, Inter-governmental Maritime Consultation Organisation, 1977). The NEDEC study suggested the construction of a 550 m. long breakwater from the west end of the PVQ towards the north, and a mooring basin with 10.8 m. water depth secured behind it, to accept 40,000 DWT class tankers. Although this plan if implemented could have provided safety it was unacceptable because of very high construction cost and the difficulty of ship operation during the south-west monsoon season. Moreover, during the north-east monsoon season there seemed to be difficulty in providing shelter. Finally, it was capable of attracting only smaller tankers which was of little economic benefit to the Port.

The ADB plan envisaged the construction of a buoy berth for 60,000 DWT class tankers to be located behind the North West Breakwater. However, before a final decision was taken as to the implementation of this plan an off shore buoy berth and a new oil harbour in front of the North West Breakwater were examined as alternatives. But in consideration of poor working efficiency, high construction and maintenance cost etc. the two alternative proposals became unacceptable. The plan selected for execution, consequently, was the construction of the buoy commenced under berth near the North West Breakwater and the work on it was to be started on an ADB loan but was later abandoned due to technical problems involved in the laying of submarine pipe lines, dredging etc.

The IMCO mission, on the contrary, recommended an offshore buoy berth in combination with that of the Port of

Trincomalee. With regard to the idea of constructing an oil berth in the Port the mission pointed out the difficulty of ship operation, rock removal along the channel and mooring basin. Above all it was realised that it would provide accommodation only for smaller tankers. Under these circumstances, the JICA took up the position that the construction of the offshore buoy berth and the dolphin berth behind the North West Breakwater as feasible both technically and economically (JICA, 1980).¹⁰

Cargo Handling Mechanism

As long as the dominance of break-bulk and conventional vessels to carry that cargo at the Port remained the labour intensive methods of handling shipping and cargo at the Port remained This had been the case in port's throughout the developing countries. But sooner or later the system had to change and it was spared off by containerisation. The basic factor being that it was through increased productivity by mechanisation that these ports could progress in the path of containerisation which in turn guaranteed their very survival in the world of changing maritime transportation. However in the introduction of mechanisation at the Port of Colombo the immediate question to be resolved was the type of mechanical appliances to be employed in container handling. The situation at the Port was such that the problem had to be perceived from several angles. It was found that the container handling methods generally in vogue were classified by handling equipment used such as the chassis system and the transfer crane system. Under the former, each container is placed on a chassis and stored in the container yard. The two other systems basically mean containers being stacked in the container yard in several layers, such as three layers using straddle carriers and five layers in the case of using a transfer crane, and both enable the efficient use of land area. The chassis system. also involves a use of a bigger terminal area, a large number of chassis and a bigger initial investment. Another factor to be considered was

that the container terminals at the Port of Colombo were to be offered for use by different users, a system capable to meet the demands of various users that called for a system that was to be flexible. Furthermore, Colombo's strategic location in the main ocean routes connecting the Far East to Europe, Middle East and Europe, Middle East and Africa or connecting Europe to Australia and New Zealand meant a maintenance of a high service level to entice container ships taking these routes and transhipment cargo. Taking all these into account, the JICA recommended the adoption of the straddle carrier system for Colombo that was commonly being used at container terminals for multi-users throughout the world.

There is no argument that the foremost requirement by the eighties was to equip the Port with container facilities. But that does not mean that the needs of the rising tonnage of general and bulk cargoes escaped the attention of the JICA Mission. It appeared that the annual tonnage of cargo handled was high with 180,000 tons or 1,024 MT per berth. But the tonnage of cargo handled per ship was as low as 420 tons a day (600 tons per day for food ships and 380 tons per day for general cargo ships). This was because ships had to wait on an average of 1.6 days for berthing (7.5 days for food ships and 1.1 days for general cargo ships) and berths were heavily congested with a rate of berth occupancy of nearly 100% at the time of the preparation of the Master Plan. The result had been increasing shipping costs leading to escalation of freight charges for import export cargo. In addition, it had reduced the operating efficiency of existing Port facilities creating the necessity for new facilities and investments. Moreover, being more or less the only international Port for Sri Lanka then handling nearly 94% of the country's import-export dry cargoes, the ill effects of inefficiency in port operations on the economy needs no explanation. Therefore, the recommendation to replace the obsolete and inefficient labour intensive methods of cargo handling system in use with mechanisation through forklifts

and pallets, became inescapable.

Based on these findings a Master Plan was drawn up to be implemented within ten years (1980-1990). The facilities to be provided within that period and the total cost of implementation are summarised in Table 5.3 (JICA, 1980). Before making a firm commitment as to whether or not to execute the Master Plan in full certain matters had to be given serious consideration. With the economy then was in a state of flux the introduction of economic reforms an element of uncertainty prevailed regarding the future cargo volumes to be handled. There was also the consideration to be given to the fact that in matters of heavy investments in port development it was neither possible nor prudent to plan too far ahead. The SLPA, that which is concerned with port management while endorsing these views observed that ports depend on shipping for their upkeep and maintenance and shipping in turn is dependent on domestic and international trade. Commenting further the Authority declared that past experience had proved beyond doubt that Sri Lanka's imports and exports were governed by trade policies which in turn had changed the pattern of cargo movements through the Port. These arguments justified port investments to be phased out and, besides, left room for adaptation to changing needs of trade, shipping and modes of cargo handling (Corporate Plan 1981 - 1985).11

The Urgent Plan

On the strength of these arguments by the SLPA, the JICA prioritised the provision of certain facilities coming within the purview of the Master Plan to meet the immediate needs of the Port. Accordingly, what was known as the Urgent Plan was prepared (Table 5.4) to meet such requirements of the Port except the oil berths. The target year of completion of the programme of work under this plan was set out to be the year 1983. The Plan, in the first place, provided the construction of

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Item	Unit	Oty	Cost Value (1000 US\$)	Share (%)	Target Year	Note
Conventional Berths KQ#2 (New Berth, Temporrary	Berth	1	diche grati augil diren		1983	Modlified to CTNR Berth After 1988
NP (Widening, 1 Berth - 2Berths)	Berth	2	3538	2.7	After Removal of Iil Dock	Widening of 50m, Two 9m Berths
NGP/SP	Berth	3			1983 (IB)	
(Cargo Berth-Ship Repair Berth)					After Completion of NP (2B)	
QEQ#5 (Container-Conventional)	Berth	-			1988	
Cargo handling Equipment	Set	-	7537	5.8	1980	
Sub Total			11075	8.5		
Container Berths:	Set	700				
QEQ#5 (Crane Foundation, etc.)	Set	1	1628	1.2	1861	
KQ#1/#2/#3	Berth	3	47736	36.6	1983 (#1)1988 (#2/#3)	# 2 (Conventional container)
Dredging	Mn.m3	1.5	2880	2.2	1983,1988	
Container Equipment	Set	1	31092	23.9	1981,1983,1988	一次一次 一次
Sub total		THE STATE OF	83336	63.9		4 1000
Oil Berth						
Dolphines	Set	1	937	0.7	Set by F/S	*A feasibility study including an in
ation						situsurvey of the bed-rock depth along the approach channel should be
Dinalinae atc	0.00	-	11616			carried out.
Rinkering Facilities	Cot		CICII	8.8		
Improvement of Port entrance	Set	-	13011	0.5		
Extension of SW Breakwater	(m)	(150)	(171)	7.7		
Removal of the South West End of NW						
Breakwater	(m)	(75)	(514)			
Seawall/Wave Dissipation work along NW Breakwater	(E)	(700)	(5326)			
Dredging	Mn.m3	3.24	0069	5.4		
Tug Boat	No	1	6161	1.5		
Sub Total			33968	26.1		
Road	Km	2.7	1861	1.5	1982 (2 Lanes)	
Grand total			130360	100.0	(1700 Lalies)	

(Note: Engineering fee and physical contingency are not included in the Table. *Source: JICA Report 1980)

Table 5.4 Summary - Urgent Plan

Conventional Berths KQ#2 (New Berth, Temporary) Berth NGP #1 (cargo Berth Ship Repair Berth) Berth					mor nogmi	INOIC
			Value (1000 US\$))	Share (%)		
						Modified to CTNR Berth
		lacari				After 1988 Transferred to CDL
	th	1			1983	
	th			*	1983	and i
Cargo Handing Equipment Set	**	1	7537	10.7	1980	
Froklift (3t) (No))	(38)	(464)			
)	(47)	(1039)			
Mobile Crane (30t) (No)) ((8)	(1462)			
Floating Crane (100t) (No)	((T)	(4572)		No. of Persons and	一
Sub total	A 100		7537	10.7		
Container Berth		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				Includes
QEQ#5 (Crane Foundation, etc.						Construction cost
	() ()	40.0		H		for 250m of #2
Set		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2,293	3.2	1981	
KO# 1 (Bulkhead, etc.) Set	***		33,912	48.1	1983	
Dredging			2,880	4.1	1983	
Container Equipment Set	Age of the second	1	13,794	19.6	1981,1983	
(Container Crane) (No))	3	(9,051)			
(Straddle Carrier) (No))	11	(3,520)			
(Others) Set			(1,223)			
Sub Total			52,879	75.0		
Read (2 Lanes) Km		5.7	1,524	2.2	1982	2 Lanes, Ditches & Sidewalks
Engineering Set		1	2,111	3.0		
Physical Contingency Set			6,407	9.1		
			70,458	100.0		

(Source: JICA Report - 1980)

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two container berths, one in the QEQ, with the length of 200 m, was to be equipped with a container crane and was to be commissioned by early 1982. The northern most container berth of the KBQ, with a length of 300 m. and the water depth of 12 m. was to be equipped with two container cranes and its construction works to be completed in the following year.

Secondly, one berth in the NGP was to be transferred to the Colombo Dockyards Ltd. by the end of 1983 and in its place as a temporary measure, one conventional berth in the KBQ was to be constructed with a length of 250 m. Besides, two lanes out of four lanes proposed in the Master Plan were also to be improved in the Urgent Plan. In addition, all the conventional cargo handling equipment proposed in the Master Plan (Table 5.5) was to be purchased within the proposed implementation period of the Urgent Plan.

Table 5.5

Conventional Cargo Handling equipment and cost estimates for Master Plan

(Unit 1000 US\$)

Equipment	Nos. to be purchased	Cost per Unit	Total cost
Fork lift tracks	38 (3T) 47 (5T)	12.2 22.1 Sub Total	1,503
Mobile Cranes Floating Cranes Total Cost	8 (30T) s 1 (100T)	182.8 4,572.0	1,462 4,572 7,537

Source: Report of the Port of Colombo Extension Project IV, Overseas Coastal Area Development Institute of Japan (OCDD) Japan Port Consultancy Ltd. (JPC) February 1995. Sarva Research Institute Corporation (Japan) The benefits to be reaped from the implementation of this Plan were: strengthening the basis for the nation's economic development through modernisation of the Port, providing the function of a centre for an entrepot trade handling transhipment cargo and providing container feeder services to the neighbouring countries; reduction in cargo handling costs by raising cargo handling productivity through mechanisation; reduction in ship costs for awaiting berth and loading and unloading of cargo by upgrading the port services; reduction in transit time through upgrading the port services; improvement in the safety of navigation by extending the waterway and expanding the turning basin; and increasing the value added earned by the Colombo Dockyard Ltd. with the modification of a cargo handling berth in the NGP to a ship repair berth (JICA Report, 1980).¹²

The Port of Colombo Expansion Project

The acceptance of the comprehensive JICA report by the Sri Lanka Government and the Japanese Government, led to the commencement of the work on stage 1 of the Port Expansion Programme in March 1983. This, in essence, was the implementation of the 'Urgent Plan'. The plan conceived the idea of constructing a new container quay 300 m. long with a water depth of 12 m. complete with adequate backup area, with Container Freight Station and the acquisition of two Gantry Cranes, four Transfer Cranes, ancillary equipment, buildings etc. Envisaged in the plan was also the construction of a new port access road crossing Aluth Mawatha Road and crossing Skinners Road which is one of the widest roads in the city of Colombo. The development area chosen was the old coaling jetties, encroaching nearly 200 m. into the water area required for the total backup.

When the construction work on stage 1 of the Port Development Programme was underway, the Port experienced a rapid growth in the container throughput. The JICA predicted a container throughput of 197,000 TEUs including transhipment TEUs by 1988. But in contrast to that prediction, the container throughput that was a trickle in 1980 turned into a flood in the next few years. So much so that by 1983 the Port handled 142,000 TEUs and by 1984 the figure leaped forward to 181,000 TEUs which approximated to JICA's prediction for 1988. In that rapid increase of container throughput, the major contributary factor, seemed to be the dramatic growth in transhipment TEUs. So dramatic was its growth that the number of transhipment containers handled rose to 65,801 TEUs in 1983 from 12,052 TEUs in 1980 recording a percentage increase of 546. Of the total TEUs handled by the Port in that year, the share of transhipment TEUs amounted to 44.9% (SLPA). Besides being a new source of income for the Port the pattern of behaviour of this trade also foreshadowed the early signs of Colombo's re-emergence as an important transhipment point in South Asia which the Port Authority could ill afford to ignore. In order to make maximum advantage of the emerging development container throughput it became vital to enhance Port capacity and thus the inauguration of stage II of the development phase in October, 1984. That programme consisted primarily of extending the quay being constructed under stage I of the Expansion Programme by a further 332 m. and providing the necessary backup support and ancillary building for the second berth. The two berths at the terminals, Jaye Container Terminal I (JCT I) and JCT II capable of handling third generation container vessels were opened for operation in August 1985 and March 1987 respectively (SLPA - Daily News, April 28, 1997).13

From 1983 onwards several shipping lines decided to build very large (fourth-generation) container vessels each carrying over 4000 TEUs and making round the world rationalized voyages, with the main objective of drastically reducing operating costs. It was their answer to the recession

confronting high cost container operation in shipping. The line of operation being to use eight or nine 'base' ports of call in the world, from where, cargoes were to be transhipped into and out of these ports from neighbouring ports to 'catch' the very frequent shipping services round-the-world. It was expected that about six or seven shipping lines would commence operating such services in the very near future. Colombo in this context could not possibly ignore its great potential to serve as a 'Base Port' in the region in view of Sri Lanka's locational advantage in the network of sea routes in the Indian Ocean as well as the position that Colombo had already gained in attracting transhipment traffic.

In a situation as such it, therefore, became quite obvious that the cranes which were to be delivered for Stage I of the Expansion Project as an immediate measure were too normal full-size cranes. Hence, the absolute necessity to upgrade these Gantry Cranes for extra height and reach, in order to handle the fourth generation vessels even before the completion of the work on stage II which was scheduled to be completed by 1986. When that was accomplished in 1987, the Port was in possession of four 35.5 tonnes Gantre Cranes capable of handling that type of container ships and ten Transfer Cranes with a capacity of 35.5 tonnes at the Jaye Terminal (Ibid).¹⁴

In view of the hazardous nature of oil handling operations, action was also taken as proposed in the JICA report of 1980 to relocate the oil handling facilities to the Island Breakwater. This was to be accomplished with the provision of a Dolphin Jetty and a submarine pipeline connecting the facility on to the shore and to extent shore pipeline up to the perimeter of the Port at the tunnel gate near the proposed Port Access Road. With the execution of the proposed project it was expected to enhance the berthing capacity of vessels upto 60,000 DWT with the provision of a dredged depth of - 14 m. Modern loading arm facilities too were incorporated in the project for

more efficient handling operations.

The Dolphon Jetty comprising 03 brestling jetties with catwalks and facility buildings together with improvements to the Island Breakwater to resist wave action, was completed in 1987. What was commendable in the execution of this project was that it was accomplished without resorting to additional loans but by utilising savings from the OECF loan extended for the construction of the JCTI & II. Although the laying of the submarine pipeline was an essential part of the new oil terminal project, unforseen problems encountered by the CPC, made its execution to be postponed for the future (SLPA, Daily News, April 28, 1997) (Ibid).¹⁵

The Revised Master Plan 1990-2001 - The Background

The acquisition of equipment, the commissioning of the two new container berths that were followed by further liberalisation of trade, brought about, an accelerated growth in the Port's cargo as well as container throughput. The cargo throughput, for instance, which was 7,338,036 MT. in 1985 multiplied to 11,469,378 MT. by 1988. An equally significant development was the growth in the container throughput that rose from 220,207 TEUs in 1985 to 628,485 TEUs by 1988. Equally striking had been the growth in the transhipment trade that grew to 628,485 TEUs in 1988 from 220,207 TEUs in 1985. In the final analysis, such growth in the cargo movements and the container throughput meant that the two new container berths were working at or nearing full capacity. The agitation by shipping circles for additional facilities for the handling of transhipment cargo was further proof of the sudden upsurge in that sphere of Port's trade.

It was not surprising, therefore, that in order to plan out facilities to meet the demands of a growing container throughput as this manner the Sri Lankan Government used its wisdom to seek assistance once again from the Japanese Government. The services of the JICA team of experts was thus made available from December 1988 to August 1989. In assessing the performance of the Port in the preceding ten years the team observed that a dynamic port development policy helped Sri Lanka's to exploit its locational advantage to transform the Port of Colombo to the foremost Port for the transhipment of trade in the region. With that as the background and on the findings of the preliminary inquiry the objectives of the study were summed up as follows:

- (1) To prepare a Master Plan for the development of the Port of Colombo for the period upto the year 2001; and
- (2) To develop and conduct a feasibility study on a Short Term Development Plan to be formulated for the development of the Port within the framework of the Master Plan.

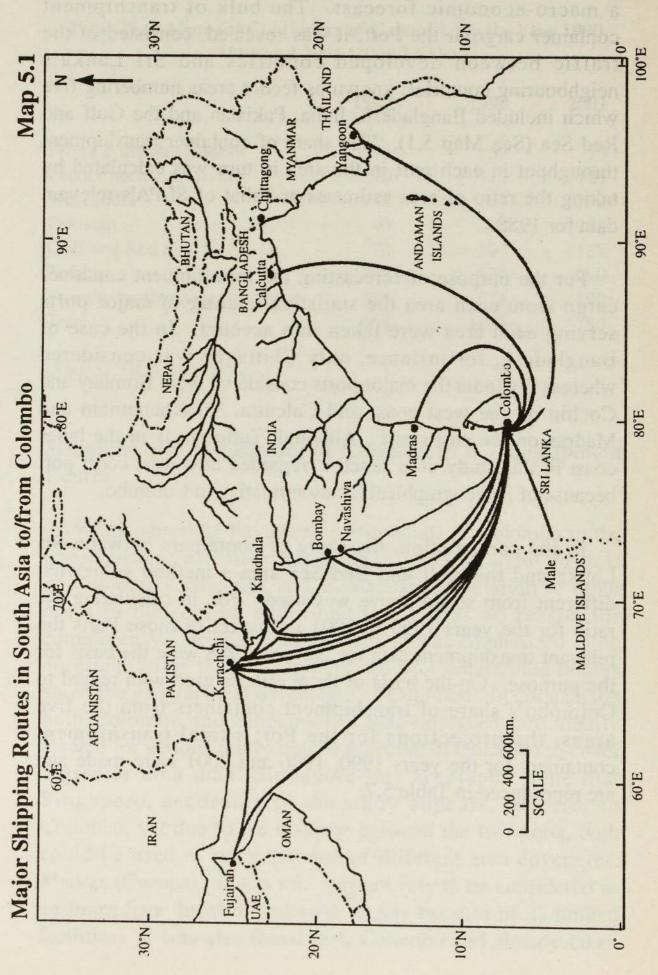
Although the focus was on Colombo, the JICA team also gave serious consideration to the issue that had gained currency in developing Galle Harbour as a project complementary to the development of the Colombo Port. But from an objective point of view it was found that Galle would not attract a substantial portion of international container transhipment business until the year 2001. To that extent it was concluded that Colombo will continue to remain as the only port handling container cargo. The Master Plan that was submitted with the year 2001 as the target year also like what had been done earlier made a comprehensive traffic forecast. In predicting the cargo flow each category of cargo was taken separately (see Table 5.6). In that the branch of trade that was dealt with at length was the transhipment trade as it had witnessed the fastest growth since the early eighties. The projected flow of container cargo was based on the relevant neighbouring areas used as transhipment countries. The

Table 5.6 Actual and Projected Cargo, Port of Colombo 1981 - 2001

		100 m	-								
	Total	3,183	3,055	3,420	3,878	4,276	4,333	3,978	5,649	8,153	10,824
Total	Container	529	929	722	848	944	1,174	1,237	1,998	3,830	6,019
184	Conven- tional	2,653	2,379	2,698	3,030	3,332	3,159	2,741	3,651	4,323	4,805
	Total	1,508	1,566	1,550	1,702	1,718	1,640	1,476	1,846	2,126	2,425
Export	Container	330	399	383	470	909	648	629	983	1,546	1,987
	Conven- tional	1,178	1,167	1,167	1,232	1,212	992	817	863	580	438
Import	Total	1,674	1,489	1,870	2,176	2,558	2,693	2,502	3,803	6,027	8,399
	Container	199	777	339	378	438	526	278	1,015	2,284	4,032
Year	Conven-	1,475	1,212	1,531	1,798	2,120	2,167	1,924	2,788	3,743	4,367
5,51		1981	1982	1983	1984	1985	1986	1987	1990	1996	2001
	Dig	Peziti	by N	loolal	nam	Foun	datio	n.	Estimated	40	

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(Source of Actual Data: Port Statistics of SLPA, JICA 1989)



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container cargo volume in areas in turn was estimated by using a macro-economic forecast. The bulk of transhipment container cargo at the Port, it was revealed, consisted of the traffic between developed countries and Sri Lanka's neighbouring countries, known as feeder areas numbering five which included Bangladesh, India, Pakistan and the Gulf and Red Sea (See Map 5.1). The share of container transhipment throughput in each port in the area in turn was calculated by taking the ratio of area estimates and that of SLPA's relevant data for 1988.

For the purpose of forecasting the transhipment container cargo from each area the statistics relating to major ports serving each area were taken into account. In the case of Bangladesh, for instance, only Chittagon was considered whereas for India the major ports considered were Bombay and Cochin on the west coast and Calcutta, Visakhapatnam and Madras on the east-coast. Although Tuticorin is in the latter coast in this study, it is stated is regarded as a west coast port because of its geographical location relative to Colombo.

In the computation, the share of containers between Sri Lanka and the Gulf and Red Sea area a method somewhat different from stated above was used. For, in calculating the ratio for the years 1990 to 2001 in respect of those Ports the relevant transhipment data for the year 1988 were the basis for the purpose. On the basis of these criteria used with regard to Colombo's share of transhipment containers from the five areas, the projections for the Port's total transhipment containers for the years 1990, 1996 and 2001 were made and are reproduced in Table 5.7.

Table 5.7

Total Transhipment Containers of Colombo for the year 1990,
1996 and 2001 (1000 TEUs)

	1990	1996	2001
From/to the Bangladesh	33	59	73
Feeder ports East India	70	117	129
West India	118	201	232
Pakistan	43	90	119
Gulf and Red Sea	70	107	137
Total	334	574	690
From/to mother Vessel's Ports	334	574	690
Total	668	1148	1380

(Source: JICA 1989)

Strengths and Weaknesses of Colombo as a Transhipment Centre

While admitting the record performance of Colombo in the transhipment trade, the study however, after a careful analysis of Colombo's strengths and weaknesses in relation to other ports in the region, cautioned that it was no reason for complacency. Dealing with strengths it was emphasized in no uncertain terms that no shipping operator entertained doubts about the geographical advantages of Colombo. In comparison both Colombo and Singapore, it was observed, are ideally located for various routes but the potential of Colombo to cover a greater area than Singapore was accepted. True that Singapore, according to the study appears, superior to Colombo, yet due to the distance between the two ports, both could be used as relay stations of different area coverages. Madras (Chennai), it was said was unlikely to be considered as an immediate threat to Colombo largely because of its limited facilities. It was also found that, Colombo had already taken the lead in the region for transhipment business and had induced the feeder operators, to use as their base port. This was to a great extent a result of mainline operators laying emphasis on factors such as deviation, quick despatch, port and cargo handling costs. At the same time the availability and the frequency of feeder networks, it was pointed out, could not be ignored. The ports in the Arabian Gulf, especially those emerging as transhipment centres such as Port Rashid, Khor Fakkan and Fujairar, according to findings by the team, were in a competing position with Colombo. That indicated the very likelihood in course of time of some portion of Colombo's transhipment throughput shifting to them. Even then, there still was the consolation that their area of operation would be limited within the Gulf area and at most up to Karachchi.

In the light of these revelations the ports that received special attention as competitors to Colombo's transhipment traffic were those ports in the Indian sub-continent that at the time were planning to expand their facilties or had already undertaken to provide them. For example, the new port of "Nhava Sheva" and the port of Madras. The measures that were being taken by Cochin and Tuticorin in this respect were also given consideration. But after taking into account the meagre facilities and the equipment then in use at these ports together with the relative Port efficiency of Colombo, the Ports in the Indian sub-continent were considered to be no serious threat at least in the immediate future.

From a long term perspective the JICA team nevertheless expressed the fear that when the efforts to provide container facilities in these ports succeed there would perhaps be the tendency for main line operators to increase periodic calls at them. But the effects of such moves on Colombo, it was also made to understand, would be minimal as mainline vessels of bigger size on economic grounds were unlikely to extend the number of transit times on the one hand, and on the other

Colombo had already established as the pivot port in the region.

Admittedly, these were views expressed in compliment of the Port of Colombo in its march towards the development of Port containerisation. But at the same time the JICA team stressed that much depended on the service standard rendered by Colombo. Presumably, the key factors to be taken into consideration to benefit fully from contain-erisation were less deviation, quicker despatch and less operational costs. Without dealing with all those aspects it may be useful to deal with the cost factors at Colombo. A comparison made with Gulf Ports, Khor Fakkan, for instance, provided services at cheaper cost than Colombo did, despite its facilities were limited. Compared with Singapore tariffs, it appeared that those of Colombo were cheaper. But the contention of certain shipping agents was otherwise. In their view, while the cost of container handling on paper was cheaper at Colombo, there were many hidden costs when compared with productivity of operations as well as the number of staff that the agents had to employ in port operations. Therefore, the net result did not show cheaper cost at Colombo to the principals.

There were other shipping agents, the JICA team observed who complained of some hidden costs arising from inevitable hires of unreliable private flat bed lorries for inter terminal haulage of containers due to a lack of equipment on the part of SLPA. There was also reference by the shipping agents it was stated about the 28 days free storage time. Port Authorities in Singapore, Khor Fakkan and Madras, they claimed, did not charge penal rates retroactively from the first day when cargoes passed beyond the free time limit. Some others on the other hand had pointed out that in Singapore, incentives were given to shipping lines such as quantity rebates, and they positively evaluated the immediate connection of transhipment boxes at Singapore (JICA Report, 1989).¹⁶

Finally, there seemed to have been some problems relating to Port operations despite the relative weaknesses of Colombo's competitor ports. As a result of unstabilised Indian ports, some JCT callers missed the schedule time on many occasions. Feeder operators also expressed strong dissatisfaction at SLPA not following a more commercial concept. Their feeder vessels sometimes, it was complained, were compelled to put out to the stream with balance transhipment boxes to accommodate other main line vessels. This they pointed out, could have been avoided if the SLPA advised the main line operators for slow steaming to adjust the arrival time at Colombo. The reason being that high speed main line operators could recover a delay of few hours easily on their ocean navigations. The improvement of the productivity of yard operations was also of greatest importance and of urgent necessity.

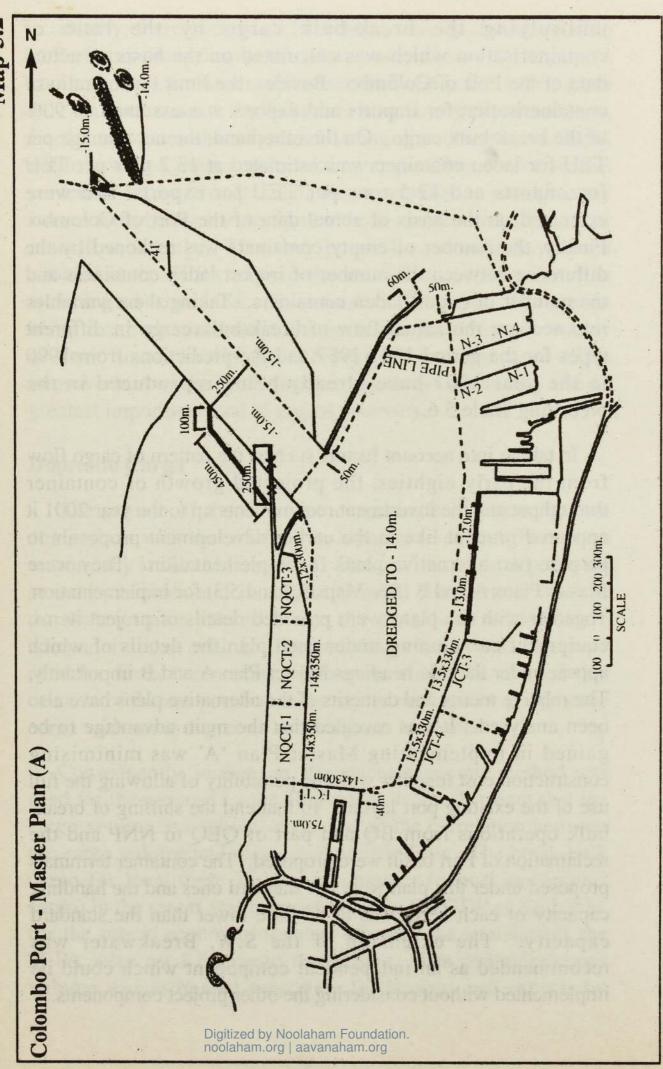
Domestic Cargo

The growth of the domestic cargo trade in extent was no comparison with that of the transhipment trade and there is no reason why it should have been. Because the trade depends on several variables and is subject to wide fluctuations that the domestic trade moved since the details of which were adequately dealt with in the preceding chapter and hence no need for further comments. However, it must be stressed that because of factors peculiar to the sector no forecast of domestic cargo with some degree of accuracy can be made.

Consequently, in that too, the macro-economic method was used for the purpose by the JICA study team. It meant that the cargo volume as a whole was based on the correlation between the cargo volume and major economic indices. The break-bulk cargo for local trade including container (export and import cargo) in the report was forecast by using the GDP of Sri Lanka for the macro-economic forecast whereas the statistics of the SLPA were used for cargo throughput. The container cargo volume was estimated separately for imports and exports by

multiplying the break-bulk cargo by the ratio of containerisation which was calculated on the basis of actual data of the Port of Colombo. Besides, the limit for the ratio of containerisation for imports and exports was assumed as 90% of the break-bulk cargo. On the otherhand, the net tonnage per TEU for laden containers was estimated at 13.7 tons per TEU for imports and 12.5 tons per TEU for exports; and were estimated on the basis of actual data of the Port of Colombo. Finally, the number of empty containers was reckoned by the difference between the number of import laden containers and the number of export laden containers. Taking these variables into account the actual flow of break-bulk cargo in different types for the period 1981-1987 and the predictions from 1990 to the year 2001 have already being reproduced in the preceding Table 5.6.

In taking into account factors such as the pattern of cargo flow from the early eighties, the projected growth of container throughput and the investment requirements up to the year 2001 it appeared prudent like in the earlier development proposals to prepare two alternative plans for implementation. They were Master Plans A and B (See Maps 5.2 and 5.3) for implementation. Together with the plans were provided details of project items, equipment etc. coming under each plan the details of which appear under the title headings Master Plan A and B importantly, The relative merits and demerits of the alternative plans have also been analysed. It was revealed that the main advantage to be gained in implementing Master Plan 'A' was minimising construction cost together with the possibility of allowing the full use of the existing port layout. To that end the shifting of breakbulk operations from BQ and part of QEQ to NNP and the reclamation of Fort basin were proposed. The container terminals proposed under this plan were not standard ones and the handling capacity of each berth was to be little lower than the standard The extension of the S.W. Breakwater was capacity. recommended as an independent component which could be implemented without considering the other project components.



DEVELOPMENT OF PORT CONTAINERISATION Map 5.3 DREDGED TO - 14.0m. 920m. NQCT-2 NQCT-1 Colombo Port - Master Plan (B)

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On the contrary, Master Plan - B envisaged a substantial reclamation outside the S.W. Breakwater, and the construction of three standard size, fully equipped container berths. Since the proposed reclamation work was to be carried out in a deep open sea area, the construction cost was estimated to be substantially higher, approximately 17% more than the cost estimate for implementing Master Plan A. Under Master Plan B, the construction of a Breakwater was suggested as an extension of the revetment for reclamation and, therefore, the construction work was expected to be started after completing a substantial portion of revetment work.

Master Plan A

1) New North Pier (NNP) No. 3 and No. 4 Berth

NNP No. 3 Berth = -11mX210m NNP No. 4 Berth = -7.5X130m

Cranes = 2

2) Fort Container Terminal(FCT)

Wharf : 14.0mX300m YARD : 121.000m2

Container Cranes : 2 Post Panamax type
Transfer Cranes : 6 high speed type

3) New Queen Elizabeth Container Terminal (NQCT)

NQCT No. 1 Berth :

Wharf : 14.0mX350m Yard : 105,8002m

Container Cranes : 2 Post Panamax type
Transfer Cranes : 6 high speed type

NQCT No. 2 Berth

Wharf : 14.0X350m Yard : 53,000m2

Container Cranes : 2 existing cranes to be utilised

Transfer Cranes : 3 high speed type

4) Extension of S.W. Breakwater by 550m and Rehabilitation of main entrance channel.

5) Dredging of harbour basin to a depth of 14

6) Computer Communication and Navigation Aids system

7) Port Highway System

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Master Plan B

NQCT No. 1 Berth

Wharf : -14mX340m Yard : 194,000m

Container Cranes : 2 post-Panamax
Transfer Cranes : 6 high speed type
Revetment (980m) and office building (9,800m)

NQCT No. 2 Berth

Wharf : -14.0mX330m Yard : 138,600m

Container Cranes : existing one set plus one new

set

Development (330m)

NQCT No. 3 Berth

Wharf : -14.0mX330m Yard : 138,600m

Container Cranes : 2 existing cranes to be utilised

Transfer Cranes : 6 high speed type

Revetment (650)

- ii) New S.W. Breakwater (510m) and Re-alignment of main entrance
- iii) Dredging of harbour basin up to 14.0m
- iv) Computer Communication and Navigation Aids System

(Source: JICA 1989)

The Short Term Plan 1990-1995

Evidently, no final decision had been taken as to which of the plans to be executed. Instead, under the terms of reference for the JICA team a short term development plan, within the framework of the Master Plan was formulated for the Port of Colombo. This plan scheduled to be implemented in the period 1990 to 1995 placed greater emphasis on certain key areas for development primarily to meet the immediate requirements of the Port's container throughput that was taking place at an accelerated pace.

One such area was the rehabilitation of QCT to be accomplished by levelling and paving of open space; simplifying of moving lines of vehicles; and connection of salty water spray was also to be looked into as it was causing corrosion of steel and of damaging machinery. As a remedial measure for the shortage of space for stacking and marshalling containers, it was suggested to clear the QEQ of sheds by relocating them in the New North Pier (NNP) or in the Crown Land.

However, the most important and the strongly recommended proposal for implementation was the construction of the new JCT. It was mentioned that if no action was taken to meet the future demand for container traffic, it would not only result in customers losing business but would also damage the high reputation that the Port had already earned among the shipping circles. A more serious concern expressed was the irreparable economic and financial loss that could bring to the SLPA. Commenting further on this issue, it was mentioned that compared with the redevelopment of the QEQ the Port could get far better return from the construction of fully equipped new container terminals JCT III and JCT IV. Hence this was to be given the highest priority in the short term plan.

The construction of the NNP was considered another essential item coming under this plan to satisfy the needs of increasing break-bulk cargo. The problem, it was stated, would aggravate if no counter measures were taken for converting fertiliser handling from the bagged form in practice to fully mechanized bulk handling system. Therefore, as remedial action it was suggested to construct NNP with one berth for

break-bulk cargo with 6,400 m² shed area installed with forklifts and two berths for fertiliser in bulk, again with 6,400m² shed and equipped with full sets of bulk handling and bagging machines. The front area of the NNP, on the otherhand, was to be set apart to handle cement in bulk. The other suggestion was to shift the oil handling operation to the dolphin berth inside the Island Breakwater from the North Pier by the completion of connecting oil pipe lines. The investment cost for relocation and renovation was to be allocated between the SLAP and the Petroleum Corporation.

The execution of the ongoing port highway project to Weragoda, approximately 1 km in distance was to be expedited together with the reclamation of the Crown Land of 160,000 m² in extent in order to obtain CFS space to satisfy the short term demand. When the preparation of the short term plan was in progress large vessels of over 270 metres in length but less than 12 metres in draft entered the existing entrance channel safely. As a precautionary measure for the safe entry of vessels of longer draft and hence was made the proposal to dredge the Port basin upto 13.5 metres and the main channel upto 15.0 metres (JICA 1989).¹⁷

Computerization

In international trade transactions, a large number of parties have to produce, check, transfer, receive, process and file hundreds of information elements relating to the goods, their transport and their payment. Such information transfer, traditionally carried out by filling in and transmitting paper documents by the eighties found to be slow, error-prone, and costly. With the proliferation of computers and the use of teletransmission techniques, it became possible to rationalize the processing and transmission of information. This is normally defined as 'the computer-to-computer transfer of commercial and administrative transactions using an agreed standard to

structure the data pertaining to that transaction'. The developed countries had already in the early eighties had introduced this concept, while in the late eighties in South East Asia the greatest progress in this field was made by Hongkong, Singapore and to some extent Malaysia to link various organizations involved in the transport of goods. By this time efforts in this direction were also being made in the Middle East. But in the other regions of the developing world including Sri Lanka less progress had been achieved (UNCTAD, 1988-58). In the context of the Port of Colombo's great headway in container throughput Sri Lanka had to take serious note of these findings.

Regardless of computerisation being the responsibility of the SLPA, the JICA team made an appraisal of the existing computer facilities at the Port. Tracing the history of computerisation at the SLPA, the report takes the year 1985 as the starting point when an IBM 4361 main frame computer was purchased. It had a main memory of four megabytes and an on-line disc capacity of 2500 megabytes. The first system that was run on the computer, it was mentioned, is the Jaye Terminal Operation System. Bought from Japan, the Container Terminal Operation package then consisted of an on-line processing series, and covered delivery and receiving of container, stacking planning, storage planning etc. The next system computerized, according to the report, was the Billing System for Port users, that was developed by a subsidiary of the Port of Singapore Authority (PSA). This system was operational at Colombo from the early 1988. The objectives of the system have been enumerated as; to provide an on-line system to print bills for the services rendered to agents; to capture revenue consignees and shippers; and to produce reports relating to revenue analysis and vessel statistics. The system at the time was introduced only at SLPA and was yet to be connected with the Port users' computer system.

Analysing the future computerization plans the report stated that the SLPA was to increase the disc capacity of the machines by 1500 megabytes by the early 1989. Other plans to be implemented in that year at the Port by the SLPA were the commencement of the use of Payroll System. The Authority had already invested on an Electronic Mailing and office Automation System from IBM. Besides, micro computers were to be connected to the mainframe computer. The purpose of the use of the Management Information System, was to process information from all the other systems. Moreover,the SLPA had also prepared plans (a) to computerize QCT operations and (b) to introduce in a later stage an on-line network connecting the Sri Lanka Customs, shipping agents etc. (JICA 1989).¹⁹

Project Implementation

In the implementation of the short term plan priority as recommended was given to the construction of JCT III and IV. The work on the former was to be commenced in mid 1990 and to be completed in 1992. Whereas the work on the other berth was to be started in early 1991 and scheduled to be over in two years. While that connected with 'B' type revetment at the NNP was scheduled to be started in early 1991 and was to be over at the end of the year. Reclamation work in this area was to begin after the completion of the B type revetment with mid 1992 as the target date for completion. Regarding the oil pipe line, a decision was taken to commence the shore work connected with it in mid 1991. Along with it was also to undertake the laying of the submarine pipeline on the 'B' type revetment and reclaimed ground in the NNP area used as the operation base. The target year for the laying of entire pipeline was to be the end of 1992. The handling of oil cargo was to start at the Dolphin Berth in early 1993 and then the rehabilitation of NNP No. 1 and 3 was to be started in early 1993 and completed in late 1994. On completion of the pipeline work at the NNP, the construction work of the warehouses and bulk handling facilities were to be set out in early 1993 and were to be operational at the end of 1995. Two years were allowed in the case of the rehabilitation of QEQ, as the work would likely to progress at a slower pace. The entrance channel was to be dredged at the end of 1992 and the communication system was scheduled to be completed simultaneously with that of the JCT No. III and No. IV Berths (JICA Report, 1989).²⁰

By way of repetition it may be stated that the most important recommendation in the Short Term Plan was the construction of the JCT III and JCT IV. The former with 330 m. quay with 13.5m depth and 17.6 hectare area was commenced construction in 1991 and was ready for use in February 1995. The work on the construction of JCT IV with a 180m quay with 14 m. depth and a 180 m. Feeder Berth with 9 m. depth to provide a total area of 06.56 hectares was commenced in 1993 and became operational in April 1995. These additional container berths with upto 14 m. draft made the Port of Colombo capable of handling post Panamax ships. To ease congestion at city roads arising from the unexpected growth in container traffic, the work on the proposed Port Access Road linking the Port at the northern ends to the Prince of Wales Avenue with 1.8 km. in length with four lanes was begun in 1991. The road was ready for use by 1993 which helped a great deal to ease congestion at city roads.

Quite apart from these major development schemes undertaken to meet the demands of containerisation of Colombo's dry cargo trade there were also other improvements effected to bring about overall efficiency in port operations. Dredging and widening of the access channel and of harbour basin were carried out together with, as stated earlier the shifting of the oil handling facilities to the Island Breakwater. However, the relocation of oil facilities by itself did not in any way spare the Port of fire hazard largely because of the very

nature of oil handling operations then at the port. Hence, the need for precautionary measures.

From the inception of the use of the Port by oil burners, oil handling facilities have been provided for in the narrow jetty between PVQ and the Dry Dock, commonly referred to as the North Pier. During the long past, the oil handling techniques and facilities inside the Port have not changed much other than in the growing volumes handled. Thus mannual labour was engaged to coil and recoil the hoses to meet the change in the height of the ship when loading and unloading a tanker. The draft too was limiting the size of vessels as the dredged depth alongside was 11m.

Since many different oil companies including Shell, Mobile, Caltex, Esso were jointly sharing oil handling facilities in the Port until the nationalisation of oil facilities in the sixties, a network of pipes was buried on shore and in the Port, the location of which was not exactly known. From the experience of recent past it was very evident that this system of pipes had exceeded their useful lifespan, resulting in constant and dangerous leakages that caused a fire hazard imminent, especially because of the adjacent Dry Dock facilities where welding and other operations are prevalent.

Thus the laying of the pipe lines that was postponed for the future due to some constraints as referred to earlier by the CPC was finally undertaken by the SLPA. The pipeline system consists of laying of 14 pipes ranging from 4" to 24" buried 2.5 m below the bottom of the seabed of 14 m dredged depth. These pipes are continuously welded with radiograph checking to ensure trouble free durable usage. The technique of placing these pipelines in one bundle is said to be one of the largest sizes of pipeline bundles placed in the world. In going beyond the period under survey in this study (1995) so as to provide the reader with the benefit of having a wider perception of the

facilities provided so far some information regarding this aspect may be provided. The facilities were designed by the JPC and the Dolphin Berths were constructed by the same contractors engaged for the construction of the JCT. The Oil Pipe Line Construction was awarded to NKK Corporation of Japan in September 1995. The New Oil Terminal which was inaugurated on April 28, 1997 has the following features.

Length of Submarine Pipe Line	950 m
Length of Onshore Pipe Line	800 m
Volume of dredging	500,000 m ³
No. of loading arms	05

The pipe system provided consist of several pipe lines as given below for different uses.

Diameter (inches)	Use de de la company de la com
24"	Fuel Oil
14"	Fuel Oil (black)
12"	Gas Oil
12"	Fuel Oil (bunker)
12"	Neptha
10"	White Oil
10"	LPG (liquid)
10"	Marine Diesel Oil (bunker)
8"	Gas Oil (bunker)
6"	LPG (vapour)

As in the case of others port development project undertaken earlier this project too was funded by the OECF of Japan with a soft loan amounting to Rs. 2,215 million. The new facility will not only bring greater safety but also will help further rationalisation of land use and pave the way for future development activities. The rationalisation of land use by this facility is expected by the Port concentrating bulk and break bulk activities on the NP and PVQ and to develop container handling facilities in a systematic manner (SLPA-Daily News

April 28, 1997).²¹ Finally, there were two minor projects executed under this development plan but which helped minimise port congestion and contributed towards SLPA's programme of containerisation of the Port's trades. One was the linking the Port with ICD's and with industrial complexes appears to be of immense benefit to industry and also to achieve a higher throughput of containers in the Port. Finally, the road network linking Port with the terminals contributed very largely to the enhancement of container movements by 1995 (see Map 5.4).

Japanese Role in the Containerisation of Colombo's Trades

The developing countries in general made slow progress in the drive towards containerisation because in that they have been inhibited by several factors. Among them the most important were capital and technical knowhow. In that respect it is not wrong to state that it was in very recent times that India managed to overcome these impediments to some degree and transformed a few of the ports to container ports. Sri Lanka in this respect holds a unique record by making its premier port forge ahead in a relatively short period to make it a fairly well equipped port in the world. That was largely because Sri Lanka from the very beginning had been fortunate enough to get Japanese involvement in a big way to overcome the impediments encountered in achieving the cherished objective of transforing Colombo to a container port. The much needed capital for infrastructure development was provided by the Overseas Economic Co-operation Fund (OECF) of Japan and between October 1980 to November 1994 loans to the tune of 70,297 million Japanese Yen had been granted (see Table 5.7) to the SLPA towards infrastructure development. More importantly, these loans, according to SLPA sources, are repayable over a period of thirty years inclusive of a grace period of ten years, and besides, carry a low interest of 2.6% per annum. Other than, being a recipient of a loan of that

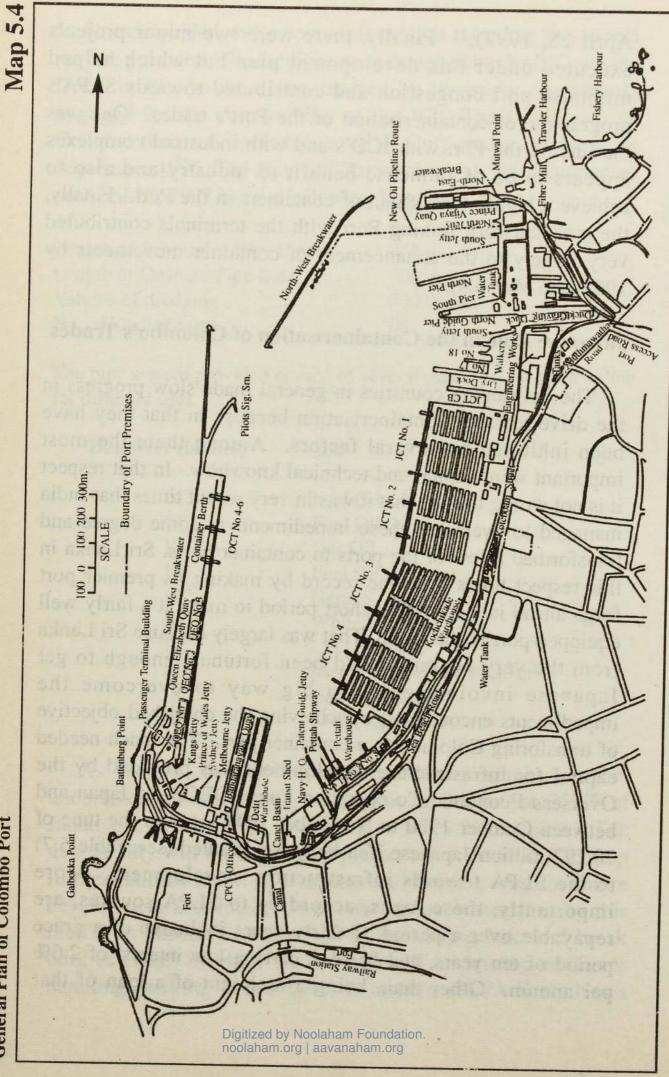


Table 5.8

OECF Loans for the Development of Colombo Port
(as of November 1994)

Project Items	include other minor equipment) JCT#1 - Civil work	JCT#1 - Equipment (G/Cx2, T/Cx4) JCT#2 - Civil work JCT#2 - Equipment (G/Cx2, T/Cx4)	Additional eqip. for JCT#1 and #2 (T/Cx2) Internal Port road Oil berth	Port Access Road	QEQ-Equip-ment (G/Cx1) JCT#3-Civil work	JCT#3- Equipment (G/Cx2,T/Cx6) Additional equip. for # land # 2 (T/Cx2) JCT#4Civil work incl.Nav.aids Oil Pipeline	Add. equip. for JCT#1and#2 (G/Cx1,T/Cx3) JCT#4 Feeder Equip. (G/Cx4,T/Cx9)	Management consultancy Service New North Pier (NNP) Consulting Services NNP:D/D,T/D,	Suprv. QEQ:D/D,T/D
Loan Amount (Million	Yen.) 7,600	6,362 2,579 ·	(852)	1,955	6,329	11,021	7,728	2,668	70,297
Date	21 Oct.' 80	23 April '84 13 May' 85		13 Oct. '87	28 May'90	18 May'90 31 Mar.'92	12 Aug'93	4 July'94	
Loan Title	Port of Colombo	Ditto (III)	Saving from SL-P4 & 7	Ditto(IV)	Port of Colombo	Ditto (III)	Ditto(IV)	Port of Colombo North Pier	Project Total
Loan No.	SL-P4	SL-P8	SL-P4 &7	SLOP12	SL-P23	SL-P27	SL-P33	SL-P41	de si

(Source: Report of the Port Colombo Extension Project iv, Overseas Coastal Area Development Institute of Japan (OCDI), Japan Port Consultants Ltd. (JPC) February 1995, Sara Research Institute Corporation (Japan)

Digitized by Noolaham Foundati noolaham.org | aavanaham.org extent on concessionary terms, the SLPA also from the inception benefitted from the services offered by the Japanese Consultants (JPC) as consultants in Colombo's infrastructure development with respect to containerisation. It was also a fortunate coincidence that the construction work on stage I in the early eighties which was entrusted to M/s Penta Ocean-Wakachiku Construction Joint Venture Company continued to be engaged as contractors in the construction work covering the JICA's project proposals upto 1995. This had helped the use of the same construction equipment and technical knowhow and thereby brought an indirect financial benefit to the SLPA.

While accepting the fact that the construction of container terminals was a great leap forward for a capital starved port like Colombo, that by itself would not have enabled it to reach the desired objective of becoming a leading container port in South Asia. The reason being that containerisation by definition as referred to earlier means mechanisation of cargo handling involving heavy capital investments as opposed to the manual handling of cargo traditionally in practise at the Port of Colombo. Consequently, in the acquisition of modern equipment by Colombo financial and other forms of assistance was forthcoming from Japan. Thus with regard to container handling equipment, Colombo, by the end of 1995 was in possession of 13 container cranes with a capacity range of 35.5 tonnes, 118 fork lift trucks with a capacity range of 2.5 - 6.0 tonnes, 15 mobile cranes with a capacity range of 7.0 - 130 tonnes and 81 prime movers with a capacity range of 30.0 -35.5 tonnes (see Table 5.9). An idea of the alongside berthing facilities by season with the physical length draught, mooring capacity etc. created by the end of 1995 could well be formed from Table 5.10. In respect of accommodation facilities for cargo handling Colombo by then had also acquired a total of 22 transit shed/warehouse units having a floor area of 78,974 m² with a cubic capacity of 475,136 m3 (see Table 5.11).

Cargo Handling Equipment - Port of Colombo (as at 31st December, 1995) Table 5.9

	Other Terminals	The state of the s	Capacity	Range (tonnes)	2007	7 0-130	3.0-6.0	0.5-6.0		the second second			Have I were	5.0-10.0	5.0-70	Children and a second
(000)	o in o		No. of Units			15	14	71		ı	94	60		10	07	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Terminal	Capacity	Range (Tonnes)	35 5-41 0			2.5-60	9.0-42.0	10.0		The same	30.0-35.5	40.0-45.0	8.0-12.0	THE RESIDENCE OF THE PARTY OF T
	JAYE	Container	No. of Units	01	30			16	18	02			61	24	39	
	100	Terminal	Capacity	Range (Tonnes)				2.5-6.0	15-42.0				30.0-35.5	40.0-45.0	5.0-7.0	
	Q.E.O.	Container	No. of Units	03	3		ı	31	3124			•	-20	12	20	
	LOCATION	Type of equipment	jitized-	Container Cranes	Transfer Cranes	Mobile Cranes	Quay side Cranes	Fork Life Trucks	Top Lifters	Side Lifters	Tugs	Motor Launches	Prime Movers	Trailors	Tractors	

(Source: SLPA Engineering Division)

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Alongside Berthing facilities by Season, Port of Colombo (as at 31st December, 1995) Table 5.10

ra nun is													500000(G.T)	35000(N.T)										
Mooring	15000	22000	22000	22000	40000	12000	18000	8000	15000	12000	3000	3000				•			12000	18000	30000	27000	12000	18000
Appron m.	15	15	15		,	14	14	15	14	14	12		•										17	17
Draught m,	9.2	8.6	10.1	8.6	8.01	9.2	9.5	9.8	9.2	9.2	6.1	4.8	12.0	13.0			•		7.9	9.2	10.4/10	9.5	9.2	9.5
Naviga- Length m.	152	152	152	.230	350	137	152	116	152	152	86	98	280	280					152	152	198/229	160	137	152
North Monsoon Physical Length m.	200	200	192	190	243	163	181	125	194	194	66	94	300	332		-			196	167	294	234	150	188
Draught m.	9.2	8.6	8.6	8.6	10.4	7.3/9.5	8.6	8.6	9.1	9.1	6.1	4.6	12.0	13.0	13.5	14.0	0.6	0.6	7.9	9.5	10.4	9.5	9.2	7.6
Naviga- tional Length m.	152	152	152	152	244	137	152	116	152	152	86	98	290	290		•	130		152	152	198/229	175	137	152
South West Monsoon Physical Length m.	200	200	192	190	243	163	181	125	194	194	66	94	300	332	330	330	172	180	196	167	294	234	150	188
Berth	100	,	3	CT 4/5	CT 5/6		2	2A	3	4	CBI	CB2	T.L.	CT2	CT3	CT4	Ex.N	Ex.s	-	2		,	-	2
Quay/Terminal/Pier	Oneen Elizaheth Onav	Ouccii Litzaocui Quay	Service of the servic	· D	igiti	Bandaranaike Ouav	by	No	olal	ham	Fo	ounc	Save Container Terminal	n.			a Moother 12 11 11		Guide Pier		North Pier	South Pier	Prine vijava Onav	

Ex.N = Extension North Ex.S. = Extension South

CT = Container Terminal CB = Coaster Berth (Source: SLPA)

Accommodation Facilities for Cargo, Port of Colombo (as at 31st December, 1995)

gr (I	5 2	20	1	26	26	2.7	;	V	2 4	5.5	7
Stacking Height(M)		1.8-3.0	3055	6	1	1 4	,	2270	2.1-3.	C.C. 2.2	
Capacity (M ²)	74.680	24,049	116,615	21.068	5,573	54.175		907 68	27.165	62.105	475,136
Floor Area (M ²)	10,220	6,357	24,246	5,309	1,304	7.000		12.264	3 690	8,584	78,974
Average Height (M)	7.3-7.4	3.0-5.5	4.3-7.3	4.0	4.3	7.6		7.3	7.3	7.3	Proof 20
No.of Units	2	4	5	2		2	Well Samon	3	1	2	22
Location/Quay	PENO E.Q	Fort Area	# Bandaranaike Quay	ettah Area	Kochchikade Area	origane oitane	Container Terminal	P.V.Q.	Canal Yard	Beira	Total

(Source: SLPA)

Summarles of Projects executed and are being carried out by the SLPA as per February 1995 (Rs. Million)

100	From To	Rs	Remarks
1. QEQ Development	1971-1983	280	1971-1979 Quay construction 1981-1983 installation of cranes
			Department of container yard and laying new ducts, cables etc.
Digitinool	1991-1993	400	
Warehouse improvement project			
	1991-1995	20	Work in progress
oola	0661-6861	2	Work in progress
aha	1992-1995	=======================================	Work in progress
m F	1995	1.5	
	1989-1994	4.5	Work in progress
nda	1993-1994	4.0	Work in progress
tion	1994-1995	5.0	One warehouse nearing completion
1			
(a) Repair and reconstruction of	1997-1994	7	Work in progress
(b) King's Jetty	1990-1994	8.0	Work completed
4. Improvement to water supply Net work	1992-1994	1.8	Work in progress
Wxpansion Project (a) Net Telephone Cable Net work 200 lines	1985	12	Project completed
(b) New digital Telephone Exchange	1991-1994	15	Project completed

Project Remarks 6. Rehabilitation of 11 Kv Underground Underground Cable Network Cable Network Cable Network Cable Network 1990-1995 Facilities Reclisities Remarks Project 1900-1996 Cable Network 1994-1997 Relaying Crane Tracks of BQ1 1994-1995 Relaying Crane Tracks of BQ1 Project Relaying Crane Tracks of BQ1 Project Relaying Crane Tracks of BQ1 Relaying Crane Tracks of BQ					
6. Rehabilitation of 11 Kv Underground Cable Network Cable Network 1990-1995 7. Additional VHF Communication 1994 8. Replacement of Quay-side Cranes at 1994-1997 1904-1997 10. Construction of New Building for 10. Construction of New Building for 11. Construction of New Carpentry 12. Shop at New Beira boat yard 13. Relaying Crane Tracks of BQ1 14. Relaying Crane Tracks of BQ1 15. Relaying Crane Tracks of BQ1 16. Underground 17. Shop at New Beira boat yard 18. Relaying Crane Tracks of BQ1 1990-1996 20 20 20 20 20 210 4 4 7.5	Pr	oject	From To	Rs	Remarks
Facilities Replacement of Quay-side Cranes at B.Q.,Q.E.Q., P.V.Q. Construction of New Building for pilot Station Employees Shop at New Beira boat yard 12. Relaying Crane Tracks of BQ1 PAdditional VHF Communication 1994-1995 1994-1995 1994-1995 12. Relaying Crane Tracks of BQ1 1994-1995	Digiti		1990-1996	20	Ducte laid from OEO to Comment.
Facilities Replacement of Quay-side Cranes at B.Q.,Q.E.Q., P.V.Q. B.Q.,Q.E.Q., P.V.Q. Construction of QCT Administration Building for 10. Construction of New Building for pilot Station Employees 11. Construction of New Carpentry Shop at New Beira boat yard 12. Relaying Crane Tracks of BQ1 PVQ	ized by Neol	Additional VHF Communication	1990-1995	120	shop sub and 11 Kv. cables installed One 1500 Kva and 500 Kva generator set installed
9. Construction of QCT Administration Building 10. Construction of New Building for pilot Station Employees 11. Construction of New Carpentry Shop at New Beira boat yard 12. Relaying Crane Tracks of BQ1 PVQ		Facilities Replacement of Quay-side Cranes at	1994-1997	210	Quotation called for one crane for 1994
 10. Construction of New Building for pilot Station Employees 11. Construction of New Carpentry Shop at New Beira boat yard Shop at New Beira boat yard PVQ 12. Relaying Crane Tracks of BQ1 PVQ 		B.Q.,Q.E.Q., P.V.Q. Construction of QCT Administration Building	1991-1995	S	Work completed
1992-1996 33 7.5	10.	Construction of New Building for pilot Station Employees	1994-1995	4	work in progress
1994-1995	Ë		1992-1996	33	Work in progress
	12.	Relaying Crane Tracks of BQ1 PVQ	1994-1995	7.5	Work in progress

(Source: Engineering Division SLPA, 1994)

The SLPA and Infrastructure Development

Preoccupied with transitional problems and having no funds of its own the SLPA played a minor role in port development activity at the initial phase. Later on, however, with its authority established in running Sri Lanka's ports the SLPA also undertook a number of projects to satisfy various requirements of the Port. Although not comparable in scale with the major projects undertake with Japanese involvement the schemes executive by the Authority supplemented them in a significant way to promote the cause of the Port's containerisation programme through minimising congestion at warehouses and smooth flow of cargo. Other than a large amount of its financial resources being annually expended on welfare activities, the estimated cost of projects executed and were in the process of being completed by 1995 had amounted to Rs. 1,168.1 million. This, however, is inclusive of a sum of Rs. 280 million spent as per Table 5.12 on container projects undertaken by the Authority from 1979 to 1983.

The concept of containerisation, as has been referred to earlier embraces an area beyond a port's physical landscape. Irrespective of developed or developing countries, containerisation at the initial phase also came into conflict with opposing interests. In that Sri Lanka, provides a classic example of a developing country's success of resolving the problems of containerisation other than those connected with infrastructure facilities and also of steering clear of conflicting interests in the progress towards the containerisation of its trades.

Sri Lanka's Progressive Policies in the Promotion of Containerisation

The port's infrastructure development with Japanese involvement unquestionably was the key factor for creating the

necessary physical environment for Colombo's rapid march towards the containerisation of its trades in a relatively short period of time. It is also equally true to say that there were also other factors that helped in many ways which contributed for the progress of Colombo's efforts in the containerisation of its trade. This is particularly so in view of the prevalent apathy towards the containerisation of trades of regional ports during the early phase of inter-modalism.

It is well known that Shipping Conferences serving the trades of the South Asian region, especially, India and Sri Lanka initially were reluctant to deploy purpose built containerships. Instead, they provided TEU capacity in general cargo carriers. The result was that at Bombay, for example, the cargo that was containerised in 1980 was not more than 25% of the total cargo passing through the port which meant that bulk and conventional cargo continued to dominate.

Although the situation remained the same in Sri Lanka until the end of the seventies, a significant break through, was however, seen in the eighties. Because of Conference behaviour, in Sri Lanka, the credit of introducing containers as has been referred to earlier goes to the APL. Partly because of its experience and success in freight transport and partly because of its offer of rates that were between 8 and 15% below Conference rates, the APL was able to gain support from shippers in Sri Lanka. The entry of an outsider like the APL on the otherhand created fear among other shipping lines that what was considered as their legitimate trade was being threatened. Consequently, from 1977 onwards many more lines, including some Conference members - Campagnie Generale Maritime (CGM), Nedland Happag-Lloyd, Overseas Container Line (OCL), Scindia, Continent Britain Asia Service (COBRA) and the Ceylon Shipping Corporation (CSC) - joined the fray offering services from break-bulk cum container to full container. Of them the national carrier, the CSC made a

remarkable effort towards the containerisation of Colombo;s trades. Established in 1969 as a joint venture with 51% government shares and 49% private share holdings, the CSC in the following year became a fully state-owned venture. Being a new comer to shipping business the Sri Lankan national carrier, in contrast to its counterparts in India was fortunate in its flexibility to adapt itself to the new technology. During the first ten years of its existence the Corporation built up a modest fleet of conventional break-bulk vessels. However, seeing the changing shipping scenario at Colombo, the CSC in 1980 got itself involved directly in container shipping. In that year in collaboration with the Neptune Orient Line (NOL) of Singapore, the CSC commenced a full container service from Colombo to Felixtowe, Hamburg, Rotterdam and Bombay, using for the purpose two 560 TEU vessels chartered from NOL. This was followed by a second collaborative service with the Pacific International Service of Singapore (PIL) linking Singapore and Colombo with Red Sea ports. For the purpose, the CSC and the PIL jointly chartered a 372 TEU fully cellular geared vessel from West Germany. The national carrier took another step forward in 1982 by deploying its first four new buildings commissioned for its own operations. Built in a South Korean shipyard, the two gearless container ships (Lanka Seedevi and Lanka Siri) of 3000 dwt / 175 TEU capacity were commissioned in February 1982 on CSC's own service from Singapore and Colombo to Dubai, Damman and Kuwait, providing a 15 day frequency. The other two cellular vessels (Lanka Srimani and Lanka Srimathie) each with 410 TEU capacity, built in the same South Korean shipyard as the other two, also started on CSC's Sri Lanka Far Eastern Container Service. In addition a feeder link service was also begun to be operated by the CSC's fully owned Ceylon Shipping Lines (CSL) which maintained a regular schedule between Colombo, Madras and Calcutta. The CSL (Ceylon Shipping Lines, a subsidiary of the CSC chartered a cellular geared ship with 217 TEU capacity (Lanka Mahapola) for this feeder service which

tied up with the CSC vessels to the Far East, Europe, the Red Sea and the Persian Gulf. Moreover, the link also provided common carrier feeder service and the hauling of transhipment boxes for lines such as the APL and the Gold Star. Another significant step to expand its container service was taken when in 1983 two more vessels, the 3000 dwt / 101 TEU multipurpose vessel (Lanka Muditha) and the other similar vessel of 10,000 dwt / 254 TEU, both built in a Japanese shipyard, were added to its fleet. However, the most noteworthy of all was the delivery in 1984 of three Argentina built 10,500 dwt/550 TEU vessels.

As a result of a connecting carrier agreement with Maersk Line of Copenhagen, the CSC, on the otherhand, also inaugurated a new container service to and from the United States and Canada via Singapore as an extension to its Far East Container Service (Auscey Service) in collaboration with the Australian National Shipping Line. Within a short period of time the national carrier thus managed to transform itself from a conventional liner operator into one with a significant number of container vessels serving a wide network of trade routes. By 1985 eight of the eleven vessels comprising the CSC's fleet strength were container ships. By that year its container capacity approximated to 2600 TEUs and compared very favourably with India's 6000 TEUs which were shared between the three main national lines, the Shipping Corporation of India (SCI) Scindia Steam and India Steam, Shipping Companies that were long standing shipping concerns.

The efforts of the national carrier to promote containerisation at Colombo received a great impetus from another state-owned institution, the CFB (Central Freight Bureau). The section 14 of the Freight Bureau Law of that year stipulates that the main objectives of the Bureau were to provide for a central freight booking office: to allocate freight space on any ocean-going vessel; to ensure economic loads to

vessels calling at the ports of Sri Lanka; to rationalise the frequency of calls and the availability of vessels; to foster the development of a national merchant fleet; and to negotiate with shipowners and shipping lines on matters such as freight rate surcharges, adequacy and frequency of services. Although all these powers were concerned only with outward - bound cargo they were, nevertheless, adequate to promote the cause of containerisation and built up the CSC, its fleet. In the context of the Conference Liners being too slow to serve the routes serving the trades of developing countries, which is already referred to, the CSC, could, therefore, be complimented for the bold attempt to invest in cellular vessels and the CFB through greater allocation of cargo helped its growth. What was more, by giving the CGM, a line which responded favourably to containerisation, the East-West trade preference in cargo allocation, the Bureau also helped to entice other lines to follow its example.

Similarly, Sri Lanka's export sector in contrast to those of the countries in South Asia showed very little resistance to containerisation. The island's staple export, tea, for example, which meets approximately 35% of world's demand stands unique in the region by reacting favourably to containerisation, at least, in some aspects such as packing, shipping and buying. First introduced by the APL it soon proved that containers could maintain the quality of tea and radically improve the transit time. The Tea Traders' Association representing all companies connected with the growing, broking and export of tea, consequently, took measures to containerise the trade. As a result of the Association's efforts about 60% to 70% of Sri Lanka's tea began to move in boxes by the early 1980s and thereafter it was much more (Dharmasena, K. op.cit., p. 126-128).²²

Port Efficiency

It is an indisputable fact that port efficiency is a vital requirement for the progress of a port competing with rival ports to attract shipping. As referred to elsewhere the need for this requirement is reinforced by the container revolution in maritime transportation. Hence, the growth and expansion of a port's container traffic to a very large extent are governed by the effectiveness of measures taken to improve efficiency of port operations. To some extent, Colombo, in that respect provided an example to be emulated by some ports in the region. With the results from the late 1970s port efficiency had improved remarkably compared to the dismal position of the Port in the preceding decades. True that the port with the introduction of containers went through a process of mechanisation of cargo-handling, but that alone was not sufficient to increase Port productivity. Better labour relations had to be maintained particularly in view of the prevalent resentment of port workers world over on containerisation because of the fear of labour redundancies. In this respect Colombo's achievements were commendable. Since the early eighties as well be referred to later more welfare measures were introduced for further improvement in labour relations. Most important of them has been the further improvement in the meal service scheme by the SLPA. By 1989 a huge kitchen with a capacity of 20,000 meals had been set up for the purpose. Towards the end of 1994 a decent meal was provided to every port employee numbering 18,000 from that kitchen. Steps were also taken to provide snacks and tea free of charge to employees engaged in cargo handling activities. Moreover, by then several medical centres had also come up as part of the health care scheme for the port employees and at the same time a scheme had also been evolved to reimburse medical expenses upto Rs. 15,000/= per year in the case of employees hospitalised on account of serious illnesses and receiving specialised treatment. To give effect to the concept that every man needs a shelter, the SLPA on its own initiative introduced a

measure whereby housing loans upto Rs. 250,000 being granted at a highly concessionary rate of interest of 6%. This was supplemented with the purchases of land suitable for housing purposes in order to provide blocks of land to employees at reasonable prices.

Apart from these, there were also other measures introduced to win the hearts of the employees. The children of all SLPA employees qualified to receive university education have been made eligible to receive a sum of money equivalent to what is paid under the Mahapola Scholarship programme, as a scholarship grant. Loans were also being granted at low rates of interest for the purpose of purchasing motor cars and motor bicycles by port employees. Finally, provision was also made for an ex gratio payment upto Rs. 30,000/= in the case of an employee who dies whilst in service to meet the funeral expenses (SLPA).²³

Mahapola Training Institute

The labour welfare measures introduced by the SLPA in addition to those in force enabled the SLPA to win the goodwill of the Port employees to a great extent that led to a further improvement in labour relations. The fear of job insecurity from containerisation was alleviated by rapid strides made in the development of skills needed for containerisation of the Port's trades as what containerisation demanded was skilled labour. Therefore, the most practical solution was the development of skills to ensure job security. The establishment of Mahapola Training Institute with financial and technical assistance from the UNDP hence was a step in that direction. Inaugurated on 21st January 1987, the Institute is equipped with a ship crane for training of crane operators; an auditorium with capacity for 300 persons; personal computers for training; workshop for industrial training; a visual education room; a library; and a fire simulator.

The institute issues a certificate for cargo handling equipment operation which is recognised as the official certificate necessary for operators to work in the ports. In the field of engineering, there are some training courses which accept trainees from outside the SLPA. Training in the different fields is conducted by persons on a permanent basis attached to the institute or by those from other division / sections of SLPA or outsiders employed on a temporary basis. The training programmes are designed mainly by utilising training courses in foreign countries conducted by UNDP or ESCAP. Established primarily to upgrade the skills of port employees the institute, above all, helps the port to avoid redundancy by retraining those whose specialisations are no longer required due to mechanisation and modernisation. Moreover, the institute had indirectly contributed to the country's foreign exchange earnings by facilitating the employment of Sri Lankan skilled personnel overseas.

As anticipated by the mid eighties SLPA had come to reap the benefits of these progressive measures. The port was able to regain industrial peace in contrast with the strike-prone dock labour force of the earlier decades. For example, the number of man hours lost due to strikes, go slows etc. at Colombo which averaged at 40,686 a month from 1962 to 1971 declined to 22,578 a month in the subsequent nine years. On the otherhand, the SLPA records of the early eighties maintain complete silence on labour disputes. Industrial peace coupled with the systematic improvements in the provision of container handling facilities, moreover, has brought about a considerable improvement in port efficiency which in turn acted as a further impetus to containerisation. Figures relating to annual average waiting time and turnround time per ship and average tons per ship per hour at berth and in the Port in the period 1980 to 1993 (see Table 5.13) for all container vessels speak highly of the gradual improvement in port efficiency. In the early eighties when the impact of container explosion was being felt at the

Average Waiting, service and turn round time per ship and average tons/hour per ship at berth and in the port for all container vessels 1980-1993, Port of Colombo Table 5.13

Average tons per ship (Berthing to completion) completion Tons/Hours	40.6	47.0	42.1	70.8	72.3	83.5	N.A.	179.3	189.0	180.8	209.0	2061	208.6
Average turn round time per ship (Berthing to completion Hours/Ship	37.3	35.6	42.5	31.3	38.4	37.1	N.A.	34.4	44.6	37.2	23.5	25.9	25.3
Average service time per ship (Commencement to completion Hours/ship	27.9	31.9	37.9	28.5	36.4	34.6	N.A.	29.1	34.2	23.2	19.0	20.0	18.3
Average Waiting time per ship (Berthing to Commencement) Hours/ship	9.4	3.7	4.6	2.8	2.1	2.4	N.A.	5.3	10.4	9.5	4.5	5.9	7.0
YEAR pazitigid	0861 Noo	1861 olaha	7861 mm 1082	1983	1984 org	5861 ion.	1986	1987	1988	1989	1990	1991	1992

(Source: SLPA, Port Statistics Series III, V, VI, X and XIII)

Port the average waiting time for container vessels had seen a remarkable decline. The average waiting time for such vessels, for instance, which from berthing to commencement that was 9.4 hours per vessel had declined to 2.1 hours in 1984. Thereafter, due to some inexplicable reasons an increase in the average waiting time was seen which reached a climax by 1988 when it averaged at 10.4 hours. Since that year some improvement was seen but the Port again began to experience an increase in the waiting time for container vessels by the early nineties. Nevertheless, the tonnage output for container vessels which is the barometer of port efficiency had seen an uninterrupted increase since 1980 except in the year 1989 and 1991 when there was a decline which was not of much significance.

Decongestion Measures

In dealing with decongestion measures, Sri Lanka, from the outset, had taken a much more progressive line than the countries of the region, India in particular, which too had been productive of attracting container vessels to its shores. Consequent to the pragmatic policy of licensing of container depots outside the Port premises, there were by 1983 ten Inland Container Depots (ICD's) that increased to thirteen by 1995 (see Table 5.14) and are being located between 2.5 and 30 km. from Colombo which cannot be considered as long distance and, moreover, provide seemingly adequate land area and warehouse space. The road widening policy implemented under the Urban Development Plan initiated in the late seventies, had relatively reduced road congestion in the transport of boxes to and from the ICD's. Another decongestion measure adopted by Sri Lanka was the reduction of dwell time to containers within the Port by offering inducements for removing containers and the levying of heavy penalty rates in the case of empties. Furthermore, the stripping of full container loads (FCL's) in Port warehouses was disallowed since direct delivery of FCL's

Table 5.14
Inland Container Freight Stations

Activities Returning of empty containers belonging to various shipping	lines, container repair Tea, Garments Consolidation work, container repair	Consolidation work Rubber container	of empty containers. Consolidation Work
Related lines Agent k'Line	Nedloyd Line Baltic, Lloyd Triestino	Yang Ming Line, SCI For all lines	Hanjin
Ware house space	600M ²	3400M ² 650M ²	465M ²
Land Area 16,00 M ²	52,000M ² 10,000M ²	20,300M ² 20,300M ²	12,00M ²
Distance from port K 8	30	8 4.9	n 10
Name of CFS/CD 1. ABC (Pvt) Ltd. Mulleriyawa	2. ACE Container (Pvt) Ltd. 1. Wattala	Asha Agencies Bartleet Freighters Ltd. Wattala	5. Cargo boat Despatch Co. Ltd. container Depot Welisara

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Activities	Air/Sea Consolidators Containers	Consolidators	Consolidation	work, Tea, Sugar Transshipment	Consolidation Work	Consolidators Rubber, Tea, Dessi cated Coconut, Fibre	Garments, Container Repair	containers
Related lines	P.O.L		Agent C.S.C.	Various Lines	Various Lines	Agents NYK, Hoegh, CMA	Unidel & Other Lines	Various Lines
Ware house space	4890M2 450M2		1,132M ²	1,132M ²	380M ²	625M ²	380M ²	1,670M ²
Land Area	8,100M2 13,800M2		40,500M ²	40,500M ²	12,150M ²	600M ²	20,300M ²	18,200M ²
Distance from port k	6.4		9	7.2	9.6	3.2	6	2.5
Name of CFS/CD Distar	6. Ceylon's LimitedColombo7. Ceylon Ocean Lines	Container Services Ltd. Kelaniya 8. Ceylon Shipping Lines Ltd.	Orugodawatta 9. East- West Containers	Ltd. Peliyagoda	Depot Wattala	11. Maritime Agencies, CFS Mattakkuliya 12. McLaren's		13. SLFA Orugodawatta

(Source: SLPA)

permitted in the case of imports. Stuffing of FCL's was allowed in the stores and factories or within the licensed ICD's. About 50% of such activities were, therefore, being done in the ICD's in the early eighties.

The Sri Lanka Customs too co-operated with the SLPA's decongestion efforts by doing away with some of the archaic practices which in the past impeded the smooth flow of traffic. Hitherto containers were treated as dutiable items of import which implied that any container removed out of the customs area first had to be inspected and a deposit to be retained with a guarantee that the remover would return it in the same condition to the customs premises for re-export. Apart from removing this cumbersome practice that involved a lengthy procedure, importers and exporters were also provided with customs facilities to strip and stuff containers at ICD's. (Dharmasena, 1984, op cit 128-129).²⁴

Colombo during the greater part of the post independence period the remarkable improvement in port efficiency and the development in port infrastructure in the eighties cannot be considered as simple achievements. Nevertheless, the merits of a port's efficiency and the development of port facilities have to be evaluated in relation to those of its competitors. This is more true of Colombo whose survival as a major port of call in the region as repeatedly stated depends by and large on the patronage of international shipping for a variety of purposes than on the island's volume of overseas trade passing through the Port.

Colombo: a comparison with Indian Ports

While Sri Lanka through pragmatic policies as discussed above was quick to respond to the demands of containerisation, some countries in South Asia lagged far behind and some

others responded negatively. In the region, the majority of Colombo's competitor ports are those of west and east coasts of India. The slow progress of these ports in the march to containerisations, unquestionably, was to Colombo's greatest advantage.

With regard to national shipping the merchant marine of India unlike the CSC had a long history and by 1978 its total tonnage had grown to 5,759,224 (grt) from 315,308 (grt) in 1948 and during the same period the number of vessels had increased from 151 to 591. It appeared that such a large fleet could not be transformed into the container type within a short span of time. Above all, due to the world-wide recession, Indian merchant shipping was facing serious problems. Reduced availability of cargo, decline in freight earnings, the need for repayment of loans, inflation and increasing expenses had resulted in severe cash-flow problems. Moreover, since the break-bulk cargo continued to dominate the Indian trade, the initial reaction was to deploy semi-container vessels which could load containers as well as break-bulk cargoes. The state owned Shipping Corporation of India (SCI) was the first to invest in such vessels in 1973, to be followed later by privately owned lines (Hariharan 1984, 2-11).25 Even then the progress was so slow that by 1978 the SCL, together with the two private lines, the Scindia Steam Ship and Indian Steam, had only about 6000 TEU carrying capacity. It was only in 1984 that the meaningful step of planning to build six container ships was taken by SCL, but the delivery of the first was not expected until mid - 1986 (Lloyd's Shiiping Economist, 1984, p.8).26 In contrast, by 1985 eight of infant CSC's eleven vessels were container ships with a total container capacity of 2,691 TEUs about which reference was made earlier. (CSC, Annual Report 1985).27

On the contrary, the thinking of the Indian import-export trade was different in the change in freighting methods. The Indian Shippers argued that if India lagged behind its competitors by not moving its products in containers it would certainly lose valuable marketing opportunities. The European importers of Indian products, the shippers claimed, showed a marked preference to have their consignments in boxes. Inevitably, these circumstances, led to non-containerisation of India's trade. True that like in Sri Lanka, the threat of outsiders presumably compelled some Conference Liners to enter container markets of India. Yet, even by 1980 it was found that the cargo that was containerised was some 25% of the total trade that passed through the premier port, Bombay, which suggest that bulk and conventional cargo continued to dominate (Containerisation International, July 1980, p. 39).²⁸

The most unfortunate development which was to Colombo's advantage seemed to have been the industrial unrest prevalent in Indian ports. The man days lost at Bombay, for example, through strikes had averaged at 298,000 days per year by 1980. So bad was the situation in that port in the early 1980s that the Bombay Port Trust (BPT) annually incurred Rs. 40 million as demurrage charges. Bombay also registered the highest delays to shipping among the major ports of India and its berth occupancy rate in 1984 had exceeded 90% which is ample evidence of acute congestion (Lloyd's Shipping Economist, 1984, pp. 8-9' Containerisation International, August 1980, p.53).29 The problem became worse due to the severe shortage of container packing space on account of which boxes were stacked in the BPT dock complex in every nook and corner and, what was more the areas allocated for stuffing and stripping were not the same (Lloyd's Economist, October 1984, pp. 8-9).30 By the early 1980s the situation was further complicated by the refusal of Indian customs authorities to allow inbound containers to leave port areas and in consequence about 5000 containers were stacked at any one time. To ease the situation the Indian Government gave its blessings for the establishment of ICD's under what was known as the Interim Container Management Programme. This plan which in effect was an emergency measure, made provision to set up two ICD's and when operational the two were expected to handle 120,000 containers per year. However, there was pessimism as to the efficient movement of boxes to and from these depots (which are outside the port premises) because of severe road congestion at Bombay (Containerisation Internationa, August 1980, p. 53); Report of the National Transport Policy Committee, Government of India, 1980, pp. 306 - 308).³¹

India also lagged behind Sri Lanka both in the acquisition of container handling equipment and infrastructure development. To take Bombay again as an example, container traffic in the early eighties, for instance, was handled almost entirely at the Indira Dock built in the early twentieth century (1908-1914). What appeared worse was that out of its 27 berths the effective berthing capacity was limited to 23. Furthermore, the port equipement, which was totally geared to meet the demands of conventional vessels, was inadequate and obsolete. By 1980, 31 of BPT's 51 mobile cranes, appeared to have been in use for more than 20 years. The need for mechanical cranes and gantries which are pre-requisities for the improvement of berth throughput of container vessels was hence actually felt at Bombay. Paradoxically, Bombay suffered from a want of container facilities in this manner at a time when the BPT was enjoying revenue surpluses. The crux of the problem was that revenue surpluses meant nothing for the BPT in the acquisition of modern equipment because of undue delay in getting approval from the Delhi's Ministry of Shipping and Transport for any expenditure involving foreign exchange (Containerisation International, February 1984, p. 61-65).³² The result was that Bombay by 1984 (see Table 5.15) was far behind Colombo in the acquision of equipment to meet the demands of container traffic.

The challenges posed by the regional ports led by Colombo compelled Bombay to address itself to a long term solution to the problem of congestion prevailing there rather than on the

Table 5.15 Container Traffic (TEU's) Bombay & Colombo 1977-1984

Year	Bombay	Colombo
1977	5472	N.A.
1978	13595	8540
1979	38820	17680
1980	77832	41672
1981	101281	57000
1982	131900	103243
1983	130695	142811
1984	N.A.	181484

(Source: Containerisation International, February 1984; SLPA)

hitherto introduced palliatives which brought very little success. The need for long-term solutions received additional weightage when future projections showed an annual increase of container throughput of 300,000 TEU's by 1990. The construction of a new port to relieve congestion at Bombay hence appeared to be the most plausible step. Nhava-Sheva project originally proposed in the early sixties, consequently, gave fresh hopes twenty years later in the early 1980s. The feasibility of the new port to be sited at Nhave-Sheva was guided mainly by factors such as the availability of a sufficiently large area of land and, what was more, that it is only 11km from Bombay itself but away from the urban sprawl.

The project was to consist of berths which included 3 containers, 2 bulk and one bunker. The work on the project was commenced in 1984 and the target date of completion was end of 1987. For the efficient handling of the projected container traffic after the completion of the Nhava-Sheva Scheme, a decision was also taken to instal three 50 ton capacity quay gantry cranes to serve the 680 m., quay length of container berths. As traffic builds up additional cranes were to be installed bringing the total to 5 by 1990 which apparently

was not considered a significant increase (Lloyd's Economist, October 1984, p.9).³³

Thus in port efficiency, provision of infrastructure facilities and the acquisition of equipment the Port of Colombo overshadowed Indian ports inclusive of Bombay, which was its foremost rival in the eighties. Nor were meaningful steps taken by the Indian Government towards solving these problems and that was to the great disadvantage of Indian ports in the changing shipping scenario where the world-wide trend was in the direction of rationalised service schedules using ever larger and more costly container ships. Intolerant of inefficient port services, such vessels were certainly in favour of using feeder services. It meant that offshore transhipment services would continue to play a dominant role in the containerisation of India's liner trade. That was to the direct advantage of Colombo located in a central position in the sea lanes serving India.

Given this locational advantage and the rapid strides made in the path to containerisation, Colombo, consequently, became the main beneficiary of weaknesses of India's ports. A survey made by the Lloyd's Economist in 1984 revealed that Colombo by the mid 1980s had elevated itself to the leading port in South Asia. Through improved port efficiency and by keeping pace with developments in maritime technology, commented the Lloyd's Economist, Colombo, was able to pull out traffic from regional ports, particularly those of the Indian subcontinent (Lloyd's Shipping Economist 1984).³⁴ A comparison of container throughput at Bombay and Colombo, for example, in the period 1977 to 1984 proved statistically that contention conclusively (see Table 5.15). From a position of insignificance in the 1970s Colombo by 1983 had overtaken Bombay in container throughput.

Neither, was there an improvement in the situation in the Indian ports latterly to the extent of stifling the position of Colombo. Even as late as by 1995 in port development India

was far behind those of the fast growing economies of the Asian region. The shippers, importers and exporters consequently had constantly expressed dissatisfaction over congestion, berthing problems and the lack of basic infrastructure facilities at the country's ports. The multi-tiered decision making process and the ensuing delay in executing projects had resulted in the reduction of the combined handling capacity of the eleven major ports to almost 85% lower than that of Singapore and congestion in Indian ports had become a major problem. Because of slow development in infrastructure facilities, labour disputes, congestion etc. Indian ports had become costlier than comparable foreign ports (Lloyd's Shipping Economist, October, 1984, p. 61). Thus, Colombo's dominance in South Asia remained unchallenged in the container age.

Colombo's Achievements in Containerisation

The development of Colombo as a modern port that was taking place since the late nineteenth century was the result of superimposition on it of advanced western technology in maritime transportation. Similar was the impact of containerisation on the trades of Colombo from the late 1970s. Independent Sri Lanka an import-export economy with a national shipping line that came into being in the early 1970s with a few vessels depended heavily on Liner Conferences to carry its overseas trade transforming their fleets to cellular type to carry the growing volume of sea borne trade with the sole purpose of making them cost effective. There was also the keenness on the part of the main trading partners of Sri Lanka to receive the country's exports and send their exports in return in boxes. For the survival of an economy dependent on imports and exports, Sri Lanka, therefore, had no option but to respond favourably to containerise its trades. This received added weight age with the market orientation of the economy about which much had been said in the preceding chapter. As

was mentioned in that the most significant feature was the drastic change in the composition of imports and exports. The value of consumer goods intermediate goods and investment goods formed 28.8%, 46.8% and 24.0% respectively of the total value of imports for the year 1980. Whereas their respective percentage shares for the year 1990 were 26.4, 51.8 and 21.7. In the export sector the change was more dramatic. In 1980, for example, in value terms agricultural exports dominated by constituting 61.8% of the total value of exports while the share of industrial exports formed only 33% of the total value of exports. In 1990 their respective shares were 36.3% and 52.7%. In 1993 industrial exports accounted for 72.3% of total value of exports (see Table 4.3, chapter IV). By 1995 the share in the value of industrial exports of the total value of exports had moved further to 75.7% (Central Bank Annuals).36

In an environment such as this, Colombo's import-export trade was rapidly being containerised after 1980. In 1979 the tonnage containerised was as low as 5.8% of the total dry cargo passing through Colombo and the remaining 94.2% was conventional. But since 1980 so rapid was the tonnage containerised that the figure rose to 43.6% in 1984, to 65.4% in 1987 to 78% in 1992 and leaped forward to 82.5% by 1995 (see Table 5.16). It must, however, be pointed out that although the port's conventional cargo in percentage terms became less important relative to containerised cargo during these years its significance for port planners remained and the rapid increase in containerised cargo hardly eclipsed its dominance in the volume of dry cargo that the Port handled.

Container Throughput

The container throughput of a country's ports generally provides an index to its progress towards the containerisation of its foreign trade. With the rapidly increasing calls by container

Table 5.16
Approximate Share of Containerised Cargo in total
Dry Cargo, Colombo 1979 - 1995

Year	Total Tonnage Colombo	Tonnage Containerised	%	Tonnage Conventional	%
1979	3,005,559	173,550	5.8	2,832,009	94.2
1980	3,373,757	381,962	11.3	2,991,795	88.7
1981	2,770,837	619.421	22.4	2,151,416	77.6
1982	3,065,953	1,034,609	33.7	2,031,326	66.3
1983	3,668,801	1,444,936	39.4	2,223,865	60.6
1984	4,296,245	1,872,720	43.6	2,423,525	56.4
1985	4,923,653	2,251,329	45.9	2,672,324	54.3
1986	5,977,000	3,479,000	58.2	2,498,000	45.8
1987	7,052,000	4,609,000	65.4	2,443,000	34.6
1988	8,902,000	6,514,000	73.2	2,388,000	26.8
1989	8,187,000	6,025,000	73.6	2,162,000	26.4
1990	9,029,000	6,713,000	74	2,316,000	25.6
1991	9,244,000	6,977,000	75	2,267,000	24.5
1992	9,184,000	7,145,000	78	2,039,000	22.2
1993	11,470,900	9,208,500	80.3	2,262,000	19.7
1994	12,243,600	10,612,100	86.7	2,231,500	18.2
1995	13,882,000	11,451,500	82.5	2,430,500	17.5

(Sources: SLPA Port Station III, V, VI, X, XIII and XVI Exclusive of Bulk Cargo)

vessels of major international shipping lines, Colombo in this regard as has been said earlier came to occupy a position of supremacy in South Asia. Moreover, as is evident from the preceding account the weaknesses of Indian ports together with the progressive policies of Sri Lanka to promote the cause of containerisation became major contributory factors to entice container vessels to Colombo. This was particularly so of those international shipping lines to operate feeder services from Colombo rather than making direct calls on most regional ports. So much so that, Colombo, in the eighties had elevated itself to the pivot port in South Asia and the container

Table 5.17
Total Container throughput, Colombo - 1978 - 1993

Year	TEU's	Annual Increase/ Decrease	% Increase/ Decrease
1978	8543	one (MS) to the Shandles	e beyolding divisal
1979	17680	9137	107.0
1980	41622	23942	135.0
1981	57807	16185	39.0
1982	103243	45436	79.0
1983	142810	39567	38.0
1984	181484	38674	27.0
1985	215876	34392	19.0
1986	348142	132266	61.0
1987	435618	87476	25.0
1988	628485	192867	44.0
1989	551810	-76676	-120
1990	595356	43546	8.0
1991	669488	74132	12.0
1992	675776	6288	1.0
1993	858412	182636	27.0
1994	972642	114230	13.3
1995	1049044	76402	7.8

(Sources: SLPA Port statistics, series III, V, VI, X, XIII and XVI)

throughput which was a trickle in the seventies turned into a flood from the beginning of the subsequent decade. The monthly average TEU's that Colombo handled rose from some 200 in the early seventies to 1400 by 1979. From then onwards container traffic at Colombo increased at such a rate that in TEU terms as demonstrated in Table 5.15 Bombay was no comparison to Colombo by 1983. In the four years between 1979 and 1983 while the container throughput at Colombo registered a growth of approximately 472% that of Bombay with a percentage increase of 238 formed nearly half of that. Smitten by recession while many leading ports in the world in 1982 registered either a low or a negative growth in container

throughput, Colombo, in contrast, occupied a unique position in South Asia by enjoying an annual growth rate of nearly 78% over the previous year and came second only to Southampton whose growth rate for the same year was 106% (UNCTAD, Review of Maritime Transport, 1988, pp. 19-20).37 Colombo maintained that pace of growth in container throughput except when it suffered setbacks in 1989 and 1992 (see Table 5.17) but in the following year a rapid recovery was seen with an annual growth rate of 27%. That level of growth however was not maintained thereafter as by 1995 the figure had dropped to 7.2%. But, it must be mentioned that the Port's fluctuations in annual growth rates, is likely to blur its actual performance in container throughput in the period 1978 to 1995. When considered in terms of the increase in the container throughput in aggregate terms, Colombo in that had kept a very high record. The figures indicate that a port which handled a mere 8,543 TEUs in 1978 had been able to increase it to the million mark by 1995 which is also eloquent testimony to the remarkable success in the provision of container facilities and other measures taken to promote containerisation of Colombo's trades.

Table 5.18

Container Port Traffic of Developing Countries and Territories 1986 and 1987 (selected ports) 1986, 1987

Country or Territory	Percentage	Change
masantai asos palmina adai	1986	1987
Hong Kong	21.2	24.6
Singapore	29.7	24.6
Republic of Korea	13.3	27.1
Philippines	16.1	18.9
Thailand	27.7	27.0
India	41.7	6.4
Malaysia	3.2	14.9
Sri Lanka	58.1	25.7
Indonesia	-8.0	4.1
Pakistan	19.7	3.8

(Source: UNCTAD, Review of Maritime Transport, 1988)

An equally, significant achievement had been Sri Lanka's performance in container throughput in comparison with developing countries and territories. The UNCTAD survey in the years 1986 and 1987 falling under the period which generally considered as Colombo's take off period in container throughput revealed that the Port's growth rates of 58.1% and 25.7% (see Table 5.18) respectively compared extremely well with many of the Asian ports. But given the infrastructure development as well as the improved efficiency in port operations it was the transhipment trade that acted as the catalyst in the remarkable achievements made in container throughput in nearly ten years after 1979.

Transhipment Trade

The unprecedented growth in the volume of trade passing through Colombo since the early eighties, no doubt, was a result of the reversal of the trade policy after 1977. But that alone was not the contributory factor in the accelaration in the growth of container traffic during the period. It was also due to the fact that when container vessels came to stay in ocean transportation together with the successes achieved by the SLPA in its efforts to improve port efficiency, there took place a revival of transhipment that had fallen into insignificance. The revival was so fast that Colombo soon regained its lost prestige as a transhipment centre in the Indian ocean. The immediate and the primary reason for the rapid revival and the fast growth of the transhipment trade after 1977, nevertheless, had been directly related to Colombo's efforts at containerisation. In fact the transhipment trade more than any other branch of trade had been a direct beneficiary of the Ports's success in containerisation. The trade experienced a phenomenal growth and stated as a percentage of the total container throughput at Colombo, transhipment TEUS grew uninterruptedly from a very low level of 7% in 1979 to 77% by 1988. With a slight drop in the following year (see Table 5.19) the trade recovered subsequently and between 1990 and 1995 it

Transhipment TEU's at Colombo stated as a percentage of the total Container throughput; 1979 - 1995 **Table 5.19**

Transshipment Container TEUs stated as a percentage of total container throughput	7	29	14	31	46	49	52	63	69	77	52	69	70	19	69	89	19
Transhipment containers TEU's	1,222	12,052	7,819	32,216	65,801	88,105	112,563	220,456	300,222	485,570	285,217	410,772	469,519	951,213	590,654	665,840	700,492
Total Container Throughput TEU's	17,680	41,622	57,807	103,243	142,810	181,484	215,876	348,142	485,618	628,485	551,810	595,356	669,485	675,776	858,412	972,642	1,049,044
Year	0261 Digiti	0861 zed	1861 by	Vool	aha avai	m F	oun	9861 datie	5 1987	1988	1989	1990	1991	1992	1993	1994	1995

(Sources: SLPA, Port Statistics Series III, V, VI, X, XII and XVI)

constituted over 66% of Colombo's total container throughput. Therefore, it clearly demonstrates that Colombo's elevation to the Port of South Asia after 1977 was more due to the rapidly increasing container throughput accompanying the dramatic growth in transhipment trade than to the behaviour of Sri Lanka's domestic trade.

Accompanying the rapidly expanding transhipment business of Colombo were other significant developments some of which have been already dealt with. From the point of view of overall port performance, the most noteworthy outcome of the lure of transhipment to the shores of Sri Lanka is its elevation to a prestigious position of a tranship centre in South Asia and thereby dwarfing the potential competitor ports in the region. Sri Lanka was thus able to achieve in a matter of few years a prestigious achievement in the fast changing maritime scene with Colombo's entry into the world league of container ports.

Until container vessels became a general feature in sea transport, ports have been ranked in terms of the tonnage of shipping they handled. In that ranking Colombo, until independence occupied a foremost position in the hierarchy of steamer ports. But with the container revolution the hierarchical order of ports in the world came to be reckoned in terms of container throughput. So slow had been Colombo's container throughput in the seventies that it lagged far behind the world league of container ports to occupy the 139th position by 1979. Thereafter, with the acceleration in the growth of container throughput accompanying the rapidly growing transhipment trade, Colombo, by 1986 gained the 44th position as a container port. In this context it is important to note that in that year, of the 348,142 TEUs which Colombo handled the share of transhipment containers was 63.3% proving the claim that it was the transhipment trade which elevated Colombo to that position. Thereafter, the growth in the transhipment containers in absolute as well as in percentage

Growth of Container Traffic at Colombo Port and its Position Among World Ports Table 5.20

World	•	139	127	85	77	65	54	44	38	36	31	31	31	31	Ann 28	07 ddu	
Rate		135.4	38.9	83.6	38.2	28.0	17.3	58.1	25.1	44.3	-17.2	7.9	125	0.0	27.0	21.2	
Total	17.680	41,622	57,806	106.120	146,690	187.727	220,207	348.142	435.618	628 485	551,810	595,810	669 448	675.776	858 398	072,642	1,049,044
Share	0.0	0.0	0.0	0.0	2.6	3.3	2,0	1.9	1.5	1.2	1.4	1.9	0.1	1.9	- 18		1
Restowing	10		•	1	3,879	6,243	4,331	6.736	6.320	7.545	7,613	11,545	11.786	12,632	15.845	•	1
Share	6.9	29.0	13.5	30.4	44.9	46.9	51.1	63.3	68.9	77.2	8.69	0.69	70.1	8.99	8.89	68.0	0.79
Tran- shipment	1.222	12,052	7,819	32,261	65,801	88.105	112,563	220,456	300,222	485,501	385,217	410,772	462,519	451,213	590,654	665,840	700,492
Share	93.1	71.0	86.5	9.69	52.5	49.7	46.9	34.7	29.6	21.6	28.8	29.1	28.1	31.4	29.3	-	•
Domestic	16,458	29,570	49,987	73,859	77,010	93,379	103,313	120,950	129,076	135,439	158,980	173,039	188,183	211,981	251,899		e le
Year	1979	1980	zed	by	1983	1984	m	our	1987	1988	1989	1990	1991	1992	1993	1994	1995

(Source: SLPA, Study for Enhancement of Port Management, OCDI of Japan, Feb. 1995, PAL-42)

terms were more dramatic and as a result by 1993 Colombo had risen to the 28th place among the world league of container ports. (See Table 5.20) and presently, (1996) Colombo ranks as the 26th (The Sunday Observer, January 4, 1998). 38

Port Revenue

The volume of trade and shipping handled being such that until the late seventies the Port of Colombo played an insignificant role as a revenue earner for the country and what was more in some years it was a financial burden on the General Treasury. The re-structuring of the economy after 1977, which brought about an unprecedented growth in both of these port business together with the better financial management by the SLPA made Colombo financially buoyant to the extent of the Port becoming a major revenue earner for Sri Lanka.

Table 5.21
Total Revenue from Transhipment Trade, Port of Colombo
(for selected years) 1976-1993

Year	(1) Total Port Revenue (in Rs. Million) approximately	(2) Revenue from Transhipment Trade (in Rs. Million) approximately	(2) stated as a Percentage of (1)			
1976	156	0.7	0.45			
1977	221	0.9	0.41			
1980	711	4.4	0.62			
1986	1885	146.0	7.75			
1988	2342	351.0	14.98			
1991	3752	450.0	11.99			
1992	4031	470.0	11.65			
1993	4931	563.0	11.42			

(Source: SLPA)

The total port revenue which was merely Rs. 156 million in 1976 rose to Rs. 711 million in 1980 indicating a more than

fourfold increase in four years. Thereafter with the remarkable growth in the Port's trade and shipping, a sharp increase in revenue was seen and and rose from Rs. 1885 million in 1986 to the very high level of Rs. 4931 in 1993. The branch of trade that subscribed substantially to such increase in port revenue was transhipment. The revenue from transhipment which was as low as Rs. 0.9 million in 1977 rose to Rs. 4.4 million in three years (see Table 5.21) and since then the trade became a major item of Port revenue. Its share of the Port's total revenue that was Rs. 146.0 million in 1986 shot up to Rs. 563.0 million in 1993 registering nearly a fourfold increase in seven years. By the latter year 11.42% of the Port's revenue came from transhipment.

From the point of view of overall financial performance of the Port of Colombo the years since the late 1970s had been unique and not comparable with any period since political independence in 1948. The reason being that more shipping meant more trade for a port and depending on the way that a port was managed it meant more revenue. But as far as Colombo was concerned the outstanding feature compared with its past was not merely a case of increasing Port revenue but of it becoming a valuable financial asset to the country. Not only did the Port of Colombo began to pay taxes on the income earned but also came to enjoy considerably high net profits (see Table 5.22) and thereby ceased to be a financially liability to the General Treasury. That itself was a remarkable achievement by the Port at a time when some loss making public enterprises have been privatised while some others were awaiting privatisation.

More importantly considered in the light of the severe foreign exchange crisis that Sri Lanka underwent from about the late fifties the greatest achievement of the Port after 1979 had been the steady growth in foreign exchange earnings by the Port of Colombo. The foreign exchange earnings of the Port that was Rs. 408 million in 1980 nearly trebled to Rs. 1142 million by 1986 and more than trebled to Rs. 3,649 million in 1993. The fourteen year financial record demonstrate that

Table 5.22 Financial performance, Port of Colombo, 1980-1993 (in Rs. Million)

% Growth	STILL ONE ORDER	22.9	12.6	17.6	11.2	7.5	21.7	5.3	15.9	18.6	24.0	7.1	11.2	23.8
Foreign Exchange Earnings	408	529	605	737	827	894	1142	1206	1434	1768	22.94	2470	2780	3649
% Growth		25.9	2.8	-41.6	20.3	23.5	21.7	2.3	-5.5	25.9	23.4	-8.8	2.0	-19.0
Net Profut after taxation	172	232	228	191	202	264	337	345	328	441	576	530	341	453
% Growth	•	28.7	27.0	-9.4	15.7	-3.8	23.7	-40.2	6.3	26.0	38.0	0.1	-10.6	1.2
Net Profit before taxation	236	331	454	415	492	474	621	443	473	639	1030	1037	938	949
% Growth		20.3	7.3	20.6	14.6	11.4	12.1	20.4	18.4	9.8	13.1	13.4	12.2	22.3
Expenditure	475	969	641	807	945	1067	1214	1526	1869	2045	2352	2715	3093	3982
% Growth		23.3	15.3	10.6	14.6	6.7	16.2	4.3	15.9	12.7	20.6	939	6.9	18.3
Total Revenue	711	927	1095	1222	1437	1541	1885	6961	2334	2684	3382	3752	4031	4931
Year	Digitize	1861 by	2861 282	lahan lavar	nahai	1985 m.or	9861 ation	1987	1988	6861	1000 H	1991	4 4 9 2	2 2 3 3 4 4 5 5 5 5 5 5 5 5 5 5

rce: SLPA, Daily News, 1.08.1994)

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while the annual average growth rate was 6% that of the expenditure was 6.3 and in no year did total expenditure exceed total revenue. In 1991 and 1993 net profit dropped by 8.8% and 19.4% respectively on account of which annual average growth rate of net profit earned was slightly lower at 4.4%. But to compensate the lower annual average growth rate in net profits earned there was the higher annual average growth rate of 6.3% during the period in foreign exchange earnings. While this had helped to some extent to ease Sri Lanka's continuing foreign exchange problem, there were also freight rate reductions by Shipping Conferences which apart from contributing to achieve the same objective also to a certain extent brought other beneficial effects on the economy as a whole. For instance, increasing the competitiveness of the country's exports and to some degree in reducing the country's cost of imports.

Freight Rate Reductions

The levy of discriminatory freight increases on Sri Lankan imports and exports and surcharges on the Port of Colombo by Shipping Conferences due largely to decling port efficiency about which references were made earlier, adversely affected the economic well being of the country in the greater part of the post independence period. In consequence Sri Lanka's exports with very high demand elasticity were adversely affected in their competitiveness in the world market which in turn had reduced the country's import capacity. This was further aggravated by freight charges and even today are a large part of both export and import cost structures.

So bad had been the effects of freight rate increases on Sri Lanka's exports that the government was compelled to take some action within its ability and that was done in the early seventies. The bulk of the export trade in non-traditionals has been handled by small scale exporters who formed a special class dealing in small consignments. To a large extent their economic survival depends on low freight charges, which

comprise a major cost item. They also found that high basic freight rates very often impeded their attempts to penetrate into new markets (Central Bank of Sri Lanka, Review of the Economy, 1976).39 Consequently, promotional freight rates have been negotiated by the CFB with the national carrier, and these were usually for three to six months. Nevertheless it was a fact that the Bureau repeatedly obtained extensions until the commodities concerned became well established in the markets. Within two years of the establishment of the CFB, nearly forty non-traditional commodities benefited from these promotional rates. Among them the more important items were rattan furniture, coconut shell charcoal, ceramics, mosaic tiles, citronella oil, plumbago, cocoa beans, timber, fishing boats mild steel angles, nutmeg and dry ginger (CFB, Annual Report for 1982).40 From the late seventies light industrial and manufactured items and tea bags in consumer packs have entered this group of exports which received concessionary freight rates. In 1982, for instance, out of 211 commodities on the CFB's negotiating list, 39 involved promotional rates and forty were revalidations or extensions. The role of the national carrier in promotional freight rates for this category of exports was clear for although the CFB was the negotiator, it was the CSC which granted them (Dharmasena, K. 1989 - 103-105).41

The impact of open economy policy and the improved efficiency in port operations was not confirmed to the vast increase in the volume of cargo handled but a similar growth in container throughput at the Port of Colombo. Latterly there was also seen a downward movement in freight rates which too could be considered an achievement in comparison with the freight rate behaviour of the pre-trade liberalisation period.

There is also evidence that the CSC on its own initiative made attempts for the realisation of the same objective, particularly in the case of traditional exports. The strongest argument in favour of a national line seeking Conference membership is that it will help to influence Conference

behaviour regarding freight rates and thereby prevent decisions inimical to the country's interests are being taken. This is particularly important on the topic of freight rate increases. Due to the secrecy maintained by the Conference System it is not possible here to give statistical data regarding CSC's success in achieving freight rate reductions, but there is evidence that the Corporation, despite the voting power of foreign lines has constantly fought against unjustified increases and has supported demands by shippers for lower freight rates (Central Bank of Sri Lanka, Review of the Economy, 1987, Table 40).⁴²

In the final analysis, the impact of the initiatives of the CSC on the freight rates of Sri Lanka's major exports, tea, rubber and coconut products as well as on the overall freight index, however, was minimal. In comparing the freight indices for the period 1965 - 1978 and 1978 - 1986, the Central Bank (using 1978 as the base year) found that for these exports rather than a reduction there ad been an escalation of freight rates. For tea, the freight index, for instance, had risen from 42.4 in 1965 to 59.7 in 1971 and to 94.8 in 1977. Since then the rise was much more sharper and rose to 206 in 1981 from 136.0 in 1979 and a drop in the index, was seen only in 1986 when it dropped to 180.1. A much more similar trend was seen in the case of the movement of the index for rubber. It rose to 94.8 in 1977 from 42.4 in 1965 and again in 1981 the index rose to 166.6 from 131.1 in 1979, and rose still further to 141.5 by 1986. These changes in turn were reflected in the overall index for exports. That which was 44.8 in 1965, for example, shot up to 94.0 in 1977 and rose spectacularly to 170.6 in 1981 from 144.9 in 1979 and declined only to 146.3 by 1986 (Central Bank of Sri Lanka, Annual Report 1993, p.100).43 Thereafter the decreases were marginal but since 1990 the freight rates behaviour turned definitely much in favour of Sri Lanka. That was primarily due to a combination of two factors. Freight rates on exports for almost all destinations showed a downward trend due to strong

competition among shipping lines following the liberalisation of shipping services in 1990. The other was the advances made in the provision of container facilities at Colombo that attracted giant shipping lines which operate with economies of scale. For example, on a product-cum destination basis, freight rates to the U.K. and the U.S.A declined by some 10% while rates to France, Canada and Australia decreased by 17%, 21% and 37% respectively in 1993. Moreover, the freight rates for exports of rubber and garments, to the U.K., U.S.A and France, too had shown a declining trend since 1990 (Central Bank 1993).44

The years after 1979 thus ushered in a new era for the Port of Colombo. Following improved Port efficiency freight rates began to move downwards by mid nineties. The average freight rates for all commodities shipped to the UK, the North Continent, the Mediterranean, France, Egypt and Syria dropped during 1996, while the freight rates to the USA and East canada remained unchanged. The freight rates to the UK and the North Continent declined by 17% each, and to the Mediterranean by 22%. Besides, freight rates to destinations in the Far East such as Japan and Singapore also declined during 1996 (Central Bank 1996).45 These and other achievements discussed in this section were made in little more than a decade. The Port was not only transformed itself from a conventional to a world class container port but in comparison with its immediate past it was also a story of success in almost all spheres of its activities. In general terms these gains can be attributed to heavy investments made to meet the demands of growing merchandise trade and containerisation. Had the style of port management remained the same there was, however, the probability to some extent of negating the effects of such port investments. Such a situation was averted when the year 1979 also marked on watershed in the realm of port management when in that the long awaited unified system of port administration was made a reality through the establishment of the SLPA.

Chapter VI

Port Management and Operations

Historical Background

The Port of Colombo from the time of its rise to the premier position in Sri Lanka occupied a unique position among the ports of the region of being run as a government dock. In Sri Lanka's context this, of course, was not a feature peculiar to the Port but one that was common in the development and the management of all transport infrastructure facilities. Despite the belief in Laissez-Faire, throughout British times, roads, railways, ports etc. remained in the domain of the public sector and continued to be so even after independence. There had been valid reasons for Sri Lanka's transport infrastructure to remain under state control and this was particularly the case when it came to a question of the development and the management of the Port of Colombo.

Although Colombo continued to be the one and only gateway for Sri Lanka's overseas trade, the volume of trade that the economy generated and the shipping that called at the Port to carry that trade was not great to satisfy the capacity of one of world's largest artificial harbours. Initially, the Port served a narrow plantation hinterland and subsequently with the expansion of the inland transport network focused on Colombo brought the whole island as the Port's hinterland. But the plantation economy with a small island population did not make much impact in the volume of shipping and the merchandise trade that the Port handled. Nevertheless, as has been discussed in the introductory section, Colombo, attracted substantially a large tonnage of shipping, that was seldom related to the Port;s merchandise trade and that was because ship visits were primarily for services. The visits of ships for

services, mainly for bunkering and transhipment, very largely were governed by the world seaborne trade that is subject to cyclical fluctuations. Consequently, a port depending on such shipping services which are considered high risk business became major deterrents for public sector involvement in port development or management.

More importantly, the nationality of the bulk of the tonnage of shipping using the Port of Colombo had been of British. In the five years 1883 to 1887 the share of the UK and British India owned tonnage of vessels calling at Colombo averaged at 75% and thereafter although the percentage dropped slightly yet the annual average remained considerably high at 58% in the years 1908 to 1912. In the case of Sri Lanka's merchandise trade the UK's share in value terms was even higher with annual averages of 87% and 66% in the periods 1883 to 1887 and 1908 and 1912 respectively (Ceylon Blue Book Annuals). Neither was there any substantial change thereafter of UK's share in Colombo's trade and the shipping which leads to the conclusion that British Imperial interests dominated the Port of Colombo. So was the British dominance over the Sri Lankan economy until political independence in 1948.

Except the coconut sector in which local capital played a very important role, the plantation sector as a whole was dominated by British capital. Similarly, the import export trade, other than food imports that were controlled by the Indian immigrant merchant community. Therefore from the point of view of British interests, it became an absolute necessity to ensure a smooth flow of trade and shipping at Sri Lanka's main outlet, the Port of Colombo. Therefore, the advocacy of government participation in the construction and the management of the internal transport network as well as the development and the improvement of the Port of Colombo which would ensure the above objectives better. In any case it was unlikely as has been referred to earlier that the private

enterprise would step in and invest capital in a plantation colony in enterprises with long gestation periods. Quite apart from economic causes there were the strategic reasons concerning the protection of British possessions in the East through the establishment of the British naval headquarters in Sri Lanka by virtue of its central situation in the Indian Ocean that called for the management of Ports by the government rather than through private agencies (Dharmasena, 1981, 110-112).²

Such being the environment within which transport infrastructure facilities had to be provided and operated, the of improvement and the administration of ports in Sri Lanka including the Port of Colombo inevitably had always been a government responsibility. Hence whatever changes that took place in these areas, administration in particular were within the frame work of a public enterprise.

As the first harbour improvement programme financed by the British colonial government was being completed in 1885, the Colombo Chamber of Commerce, proposed that the harbour should be placed under a Port Trust as in th case of the Port of Bombay. But the thinking of the colonial government was different and the status quo of managing the Port as a government responsibility was retained. The Harbour Board that was instituted in 1885 after the completion of the first harbour improvement programme, therefore, consisted of the Principal Collector of Customs Master Attendance; the Harbour Engineer; and some non-official members nominated by the Legislative Council to advice the government on the running and improvement of the Port (Sessional Paper X, 1913).³

The composition of the Harbour Board thus shows that it was rather an advisory body than one with executive powers. The result was that the affairs of the Port were run by several authorities with no proper co-ordination and at times this affected the smooth running of the Port. The following

government departments, for example, were connected, to a greater or lesser extent, with the working of this establishment. The Customs Department under the Principal Collector of Customs, the Port Surgeon under the chairman of the Plague Committee; the Master Attendant's Department; the Harbour Works Department under the Resident Engineer; the Public Work Department under the Director of Public Works; the Plague Committee under the chairmanship of the Principal Collector of Customs; and the Government Agent of the Western Province (Ibid; Dharmasena, 1981).⁴

As the programme of port development reached its final stage by 1911 accompanies by a tremendous growth in the volume of trade and shipping the weaknesses of the prevailing system of management became apparent. This was particularly so as strains appeared in the cargo handling mechanism which in turn paved the way for the mercantile community to revive its earlier agitation for the establishment of a Port Trust as found in Bombay as an answer to the problems of the Port. However, the Legislative Council, maintained as it did in the late nineteenth century that the case of Colombo was different and the Port should continue as a government dock. The Council observed that, Colombo, differed markedly from the Port of Bombay which was run by a Port Trust. The latter according to the council lived on its own assets, developed and reclaimed its own lands and raised it own loans. On the contrary, the Port of Colombo depended heavily on government financial assistance and had no assets of its own. Therefore, the Council held the view that the important executive functions should not be vested in a body independent of the government. But being not satisfied with the existing system of port management the Legislative Council appointed a commission of inquiry in 1912 to recommend a suitable system of administration for the Port. The commission of inquiry while confirming the views of the legislature on the setting up of a Port Trust expressed the dissatisfaction regarding the existing system of administration and hence recommended the abolition of the Harbour Board

Instead of the affairs of the Port being conducted by several authorities, the inquiry commission recommended the establishment of a separate department with each branch administered by a special head. The entire department was to be under a chief port commissioner with full powers to make the machinery of port administration run as smoothly as possible. The Principal Collector of Customs would always be the Chief Port Commissioner and have under him the following departments:

Navigation and Magisterial Department administered (a) by the Master Attendant;

Customs and Commerce Department administered by a (b)

Collector of Customs; and

Works Department administered by a Superintending (c) Engineer.

The Harbour Board was to be replaced by a Port Commission composed of five officials and four unofficial members. The Principal Collector of Customs, the three heads of departments mentioned above and the Principal Civil Medical Officer were always to be the five official members. Out of the four unofficial members three were to be nominated by the Chamber of Commerce to represent the import and export trade, shipping and coaling interests and landing agencies. The fourth member was to be nominated by the Governor to represent what were known as native interests in the Port.

The Port Commission so constituted was to be vested with extensive functions such as the construction projects, other than those undertaken for it by the Public Works Department, maintenance and improvement of all works within the harbour area, including docks, wharves, jetties, piers, warehouses, roads reclamation, dredging, quay walls and railways; the arrangements and maintenance of all moorings the management and upkeep of all cranes, tugs, boats etc. being the property of the Port;

regulation of the use of the harbour, the traffic on the roads and the cart areas, the storage of goods in warehouses; and the landing and shipping of cargo, whether by its own employees or through the agency of landing companies. These recommendations were accepted by the Legislative Council and accordingly in 1913 the Colombo Port Commission (CPC) was established to manage the affairs of the Port of Colombo (S.P.X. of 1913; A.R. of the CPC for 1914; and Dharmasena, K. 1981).⁵

During the inter-war years the fortunes of practically all branches of Port's trades fluctuated, the worse years being the early 1930s when the effect of the world-wide depression were felt. The tonnage of shipping calling at Colombo dropped to 21,756,362 in 1933 from 24,008,624 in 1930. The volume of merchandise trade (exclusive of coal and fuel oil imports) on the otherhand dropped to 1,488,683 tons in 1933 from 2,054,002 tons in 1929. The value of ship stores supplied at Colombo also witnessed a similar trend as it dropped to Rs. 17,043,809 in 1933 from Rs, 27,876,604 in 1929. Similarly, the water supplied to shipping declined to 87,065,900 tons in 1933 from 118,834,900 tons in 1929(Ceylon Government Blue Book (Annually); A.R. C.P.C).6

It was an unfortunate coincidence that the establishment of the CPC was immediately followed by war-time restrictions on trade and shipping. By the early 1920s although trade and shipping began to recover, it was at a slow pace. Consequently, rarely did the CPC enjoy revenue surpluses after its establishment. In fact in most years the CPC suffered financial deficits except in the early 1920s. The nett deficit that the Port incurred in 1914 which was Rs. 1,666,940 almost trebled to Rs. 3,557,823 by 1919 but dropped to Rs. 371,064 in 1928. But the financial deficit began to rise once again with the onset of the depression and by 1931 it stood at Rs. 1,567,868.

The weak financial position of the Port no doubt was beyond the control of the CPC but a result of extraneous factors at work during the World War I and in the aftermath of that war. Even so, the mercantile community put the blame on port administration for no other reason than to renew their earlier agitation for the transference of administrative responsibility to a Port Trust. To strengthen the argument the mercantile community now claimed that the cost of maintaining the Port was being borne by them. The Committee that was appointed by the Legislative Council in response to their request and to inquire into the matter, however, held different views.

Regarding their argument that the port charges in the main were paid by the importers and the exporters, the Committee pointed out that it was not true as in the final analysis they are borne by the consumers of imported goods or producers of exported goods. In respect of their second argument that the country could ill afford to forgo the substantial revenue earned by the Port particularly during a period of financial stringency as was the case in the early 1930s, the Committee again held a different view. Accepting the fact that it was beyond any doubt that the Port of Colombo had on the whole been a charge upon the general revenue the committee at the same time held the view that it was neither desirable nor feasible to secure from the Port any appreciable contribution towards the general revenue. While these were valid reasons put toward by the Committee of Inquiry against the transference of administrative responsibility to a Port Trust the elected representatives in the Legislative Council led by D.S. Senanayake strongly opposed the establishment of such an Authority. Their argument being that such an authority would while serving the interests of the mercantile community the large number of whom were non-nationals would certainly act against the interests of the Sri Lankan community at large. (CO. 57/238 -1931).7

Post Independence Period

The arguments presented against a change in the style of port management became acceptable so long as the trade and shipping handled by Colombo remained at a level that did not impaire port efficiency. On the contary, during the inter-war the actual situation that was discussed earlier in this study had been an unusual decline in all branches of the Port's trades. In the absence of apparently decline in port efficiency as the compaign of those for the replacement of the CPC with a different form of port administration could muster very little support for their cause.

With the sudden growth in the Port's volume of trade and shipping accompanying the post war economic boom, some weaknesses of the port nevertheless became much more apparent. Nor could independent Sri Lanka possibly allow the weaknesses to persist because of its over dependence on foreign vessels to carry its overseas trade as well as the absence of any other developed port in the country to diver port traffic. Consequently, the Millbourne - Christoffelz Committee that was appointed in 1951, whose terms of reference was to inquire into the handling of ships at Colombo, nevertheless, for the first time since 1912 made it a point to examine the functions and the structure of the CPC. In the opinion of the Committee of inquiry these two aspects had a direct relevance to the subject under consideration.

The Committee took a serious note of the shortage of technical officers and the various formalities that led to delays in the purchase of equipment, machinery etc. which had a detrimental effect on maintaining efficiency in the working of the Port (Ceylon Sessional Papers 1951 Port of Colombo: Report on Handling of Ships).⁸ Having considered the representations made regarding these matters by those connected with the affairs of the Port the Committee concluded

that the existing set-up was not the ideal one to run the affairs of a port of the size and importance that Colombo was. Therefore, the recommendation to set up a Port Authority with a considerable degree of autonomy vested in it, and freed from government departmental control in its day-to-day affairs of the Port (Sessional - II, 1957).9 What the members of the committee had in mind was a Port Authority consisting of a Board of Members, responsible for guiding the policy and development of the Port and who would be representative of shipping, commercial and governmental and other interests, and with a Chairman nominated by the government. Acting under the direction of this Board was to be a General Manager who would be responsible for all executive work. Such an administrative arrangement, the Committee pointed out, would be preferable to the CPC as it would make far more satisfactory and harmonious working and would offer better service to the community as a whole (Ibid).10

It was surprising that despite the inherent weaknesses of the CPC that were considered impediments in promoting port efficiency and also despite, among other factors, the removal of those weaknesses would gear independent Sri Lanka's economy on a path of faster growth, official circles expressed doubts about the success of the proposal. That reaction of their's was a result of the errorneous assumption that the Authority so established, would very likely to be controlled and operated solely under the direction of the users of the Port and other vested interests. There was also the fear that the running of the Port by such an Authority would lead to a situation where they would follow a policy inconsistent with that of the government. But as cargo handling operations deteriorated further, another Commission of Inquiry was appointed in 1956, (the Gratiaen Commission) specifically to go into the working of the commercial sector of the Port of Colombo. That Inquiry Commission not only endorsed the recommendations of the Millbourne-Christoffelsz Committee proposals of 1951 but

dealt at length on the weaknesses of the CPC and also the need and the advantages to be derived by setting up an autonomous Port Authority to run the affairs of the Port of Colombo.

In the first place the Commission dispelled the fear expressed in official circles regarding the 1951 committee proposal to replace the CPC by an Authority by stating that such a body would not enjoy no more autonomy than the government was prepared to delegate to it. Moreover, that all the practical advantages foreshadowed by the Millbourne Committee, it was mentioned, could be realised while at the same time guaranteeing to the government - through sufficient weightage in the personnel nominated by the government to serve on the Board of Directors - its undoubted right and duty to have an effective voice in port policy. Going further the Commission observed that what was essential was to free the Port Authority from the formidable obstacles created by Treasury control in the details of day-to-day operations.¹⁰ (The Gratiaen Commission, 1956).¹¹

Elaborating further the Commission mentioned of instances which illustrated the manner in which the Port of Colombo functioning as a government department had found it difficult to attend satisfactorily to urgent requirements in the course of its day-to-day work. This in the opinion of the Commission was owing to the need for inflexible adherence to financial regulations which were quite inappropriate on the smooth working of a commercial undertaking like the Port serving the whole of Sri Lankan economy.

Another advantage that would arise from some measure of autonomy was that the considerable profits earned annually by the Port would instead of being credited to the General Revenue, could be earmarked in accordance with carefully prepared plans, for future port development. Such a system, it was claimed, was far more satisfactory than the prevalent

policy of procastination until things had gone out of control, and then undertaking vast expenditure such as was involved in the Port Development Scheme of the 1950's.

If an autonomous Port Authority was established, no government department (its capacity as a consignee of imported goods) would enjoy the unhealthy privilege as it was at that time of converting transit-sheds in the port area into temporary or semi-permanent ware-houses free of rent. The more serious effects of this practice had on efficient flow of cargo at the port was adequately dealt with in Chapter Three and hence needs no further elaboration.

Quite apart from these observations, the commission was also emphatic about the necessity for all port operators to be controlled and directed by a single line of command. The reason being that the planning should not be entrusted to the private operators themselves, either jointly or severally. To reinforce the argument in favour of an autonomous Authority the Commission also brought to light some of the weaknesses of the CPS's administrative structure. Notwithstanding the fact that the chairman of the CPC always had been a civil servant of marked ability he had been constraint to carry out an efficient service because he was required to perform the dual duties of Chairman and Principal Collector of Customs. Each of these offices called for a full time job and should have been entrusted to a separate officer of equal qualities. Thus the Chief Executive Officer of the proposed Port Authority should not be pre-occupied by other official duties which prevents him from concentrating on difficult problems of port administration. In addition, it was considered to be undesirable that the chief executive officer to continue to belong to a transferable service in which, after he had become qualified as a specialist in port work got promoted on higher pay to another government department. Besides, the salary attached to that post was quite inadequate to attract a suitable officer of a non-transferable

permanent appointment. This criticism equally applied to many other executive posts in the Port (Hanzard, House of Representatives, The Port (Cargo) Corporation Bill 1958).¹²

The idea of replacing the CPC with an autonomous body although was entertained both by the Millbourne-Christoffelsz Committee and the Gratiaen Commission no positive action was taken in that direction. The only steps taken were the government involvement in certain areas of port activity. One was in the area of stevedoring, landing, and warehousing cargo, wharfage, the supply of water and the bunkering of coal and services in the ports of Colombo, Galle and Trincomalee. Since stevedoring had been the monopoly of the private sector from the inception of Colombo's rise to the position of primacy in Sri Lanka it is quite relevant to the subject under consideration to analyse the peculier reasons behind the decision to take-over by the government of these responsibilities which were eloquently expressed in the House of Representatives in introducing the Port (Cargo) Corporation (P(C)C) Bill in 1958.

Dealing with the background to the creation of the proposed (P(C)C) it was stated that on the outbreak of the World-War II, the Port of Colombo assured greater importance in Eastern waters. As a result the Port was called upon to cope with a greater concentration of shipping in it than ever before. For example, on one occasion the Port handled over 406,000 tons of allied shipping. Cargo handling operations within the Port had, therefore, to be brought under strict supervisory control and management. A quick turn-round of shipping became imperative and to achieve that objective the Chairman of the CPC was vested with vast legal powers. Consequently, the advantages of the regulation of private enterprise and of the planned co-ordination of all cargo handling operations became quite self-evident during the wartime management of the Port of Colombo. It was this which ultimately led to the passing of

legislation - (Port of Colombo, (Administration) Act. No. 10 of 1950)¹³ - for the regulation and control of all private enterprises operating in the Port. Cargo handling by private enterpreneurs was permitted only under an operating licence and legislation was extended to the sphere of labour employment as well. The government's laissez-faire attitude towards cargo handling operations brought to light, one important realisation by the late 1950s. That the proper direction, control, co-ordination and supervision of cargo handling by private operators and the regulation of working conditions of port labour should unquestionably be the responsibility of the government.

In addition, it was revealed that port administration was being carried out under a complex situation. Firstly, the volume of goods traffic had increased almost beyond the physical capacity of the Port of Colombo and its facilities to handle it. For example, the import of general cargo alone had increased by over 50% of the pre-war level and food cargo had increased by over 200,000 tons which alone was sufficient proof of the growth in the volume of imports. Moreover, the changes in the global economy and the post-war pattern of commercial practices had the effect of increasing the number of importers of general cargo. Similarly, the increase in passenger traffic. All these changes no doubt placed a heavy strain on all forms of port operations but it was also evident that the limited resources of the Port were not being put to the best advantage. The cumulative effect of all these factors was the tragic deterioration in the working efficiency of the Port. That in turn appeared to be a serious threat to the reputation of the Port of Colombo. The private operators - the group of stevedores landing and lighterage companies - did not prove equal to the challenge of this situation. The logical outcome of this position was a breakdown in the normal healthy relationship between the employer and the employee (SLPA Act No. 51 of 1979; reports and Accounts, SLPA 1991, p. 95).14 The haphazard unco-ordinated cargo handling operations were made worse by

labour unrest and bad discipline about which much had been said in Chapter Three of this volume.

A solution to the problem, therefore, became a matter of great urgency. In the context of Sri Lanka, it is no exaggeration to state that the disorganisation of the Port was a potential threat to the economic survival of the nation. A long term solution for the improvement of the labour situation hence became inevitable particularly because cargo handling in the Port was a labour intensive operation where a healthy relationship between employer and employee was a sine qua non. This was the backdrop of events that led the government to decide on the nationalisation of the Port in the sense that all cargo handling then undertaken by private operators was to be entrusted to a single agency such as a State Corporation which could direct, control, co-ordinate and supervise all cargo handling operations. The Corporation was also to assume full responsibility for co-ordination of labour, work and welfare in the Port of Colombo. Thus the birth of the Port (Cargo Corporation (P(C)C) as a body corporate under the Act No. 13 of 1958 to carry out the functions mentioned above in the ports of Colombo, Galle and Trincomalee which were nationalised with effect from 1.8.58, 1.10.64 and 26.10.67 respectively. The other measure taken was the establishment of the Port Tally and Protective Services Corporation established in April 1967 the functions assigned to which were stated earlier.

Contrary to expectations there seemed to have been no satisfactory improvement in labour relations leading to a betterment in port operations in the period immediately following the nationalisation of the Port of Colombo. With the passage of time however, especially from the mid 1960s there appeared signs of improvement in that aspect of port affairs. The fact that surcharges on the Port of Colombo by Conference Liners due to congestion and slow turn round of vessels which were regularly imposed before 1965 became normal thereafter

is sufficient proof of that development. True that the decline in the volume of imports accompanying import restrictions in force since the early 1960s it could be argued that it contributed much to ease congestion and improve port efficiency. However, the drop in cargo movement at the port was not to such an extent of marginalising the importance of labour in port operations. Besides, it must also be said that until 1980 the severity of the economic crisis Sri Lanka was going through was such that in development programmes transport infrastructure development received low priority. Therefore, it is incontestable that the new port administration that gradually brought the cargo handling operations to some order through better labour relations was primarily the reason for the improvement of port efficiency that was seen since the mid 1960s. The gradual decline in the number of man hours lost by the Port of Colombo after 1970 on account of strikes and work stoppages and which even became insignificant (see Table 6.1) by 1978 further strengthens that argument. Although the level of port efficiency that was reached by then was no comparison to what had been in the immediate post war years it nevertheless was an achievement in considering the turbulant times through which the Colombo Port was passing through from the mid 1950s. Leaving aside the major weaknesses from which the Port still suffered in the 1970s the achievements in port operations by that decade could be considered to have ushered in a new era for the Port of Colombo. At the end of that decade, for instance, there were signs of the Port gaining confidence among international shipping circles to the extent that the Port of Colombo was complimented by international news bulletins and shipping magazines. An extract of a bulletin that appeared in the "Maritime Times", Bombay in 1978 and which is reproduced below bears ample testimony to Colombo's reputation in the region particularly its competitor ports in the immediate neighbourhood.

Table 6.1

Number of man hours lost at the Port of Colombo due to strikes and work stoppages from 1962 to 1978.

YEAR	No. of Man Hours Lost	YEAR	No. of Man Hours Lost
1962/63	68,011	1973	4,192
1963/64	24,701	1974	1,229
1964/65	93,352	1975	204
1965/66	64,450	1976	9,097
1966/67	7,433	1977	3,853
1968	22,219	1978	51
1969	54,889		
1970	70,476		
1971	1,325		
1972	1,260		

(Source: P(C)C)

"Colombo is by no means, a modern port in the sense Singapore is, nor Sri Lanka a developed affluent country. Like India Sri Lanka also has not been able to afford high investments in modernising its ports and their equipment. It has also the same type of labour problems as India has. Yet Colombo has been able to keep port congestion at bay in recent years while Indian Ports have fallen prey to it time and again, and Bombay particularly has been overwhelmed by it...."

Since Colombo's success is not achieved either through labour productivity nor through productivity obtainable by way of turn round by vessels consequent to high degree of unitisation of cargo and handling of such cargo through modern port equipment, it is no less than a miracle...".

Indian vessels calling at Colombo has seldom waited for berths or cargo in recent years. Should we then not take notice of the achievement of our next door neighbour? The Indian National Shipowners' Association, All India Shippers Council and the representatives of our Ministries of Commerce and Shipping should endeavour to study this "Miracle" at Colombo and try to find out whether there is anything worth learning in the way the flow of trade at Colombo Port is being managed".

These were encouraging observations made by impartial observers outside Sri Lanka on a nationalised venture at a time when some state run enterprises in Sri Lanka were found to be colossal failures. Despite the compliments, the Port of Colombo had to make much headway to win back its lost prestige for expeditions despatch of vessels and once again to make it a shipping centre in South Asia. Among the causes that still prevailed as impediments to the realisation of that objective was the management problem. As was stated earlier it in essence was the lack of a single line of command as the Port was being run by three different departments (CPC, P(c)C and Port Tally and Protective Services Corporation) with overlapping responsibilities and with no co-ordination and such system of administration was a hindrance to long term planning to meet the future demands of the Port. Consequently, the creation of a unified system of administration proved to be a primary requirement for the Port of Colombo by the late 1970s. Such a need in fact had been echoed in the ESCAFE (now ESCAP) report of 1966 that was based on the study of the working of ports in the region. For Sri Lanka the creation of a unified system of port administration under a "Port Authority" on a high priority basis was strongly recommended. Accordingly, draft legislation for the purpose had in fact been prepared as far back as in 1968. But the development in the economy as were reflected in the commercial activities of the Port of Colombo showed no urgency to take positive action in that direction at least for the time being (ESCAFE, 1966, P(c)C, 1978).15

The Sri Lanka Ports Authority

The economic restructuring programme that was initiated by the new government of 1977 placed accent on import liberalisation. The success of that policy found to be heavily dependent on increased productivity of the Port of Colombo which continued to be practically the only gateway for Sri Lanka's overseas trade. The success of export promotion which was also an important element of that policy initiative on the other hand depended primarily on the competitiveness of Sri Lanka's exports in the world market for which lower port costs became a vital part of total cost of exports. Quite apart from trade liberalisation there were the two other developments that also drew attention for enhanced port efficiency. The implementation of some lead projects including the ambitious AMP (Accelerated Mahaweli Programme) was one of them. It was realised that as the country approaches self sufficiency and development projects such as Mahaweli mature the bulk of the imports of food items and machinery, it was argued, would decline. This short fall, therefore, had to be compensated by handling cargo for other countries in the region. Port conditions in the neighbouring countries were found to be unsatisfactory and hence it was found to be the opportune time to develop the Port of Colombo and capture a vast trade that would otherwise go elsewhere. (Corporate Plan 1981-85)16 The growing impact of containerisation on the Port of Colombo and that which put a premium on efficiency was the other development that drew far greater attention of authorities by the late 1970s. A high level of port efficiency and the need to plan ahead of unquestionably became the vital demands of these developments and it appeared very obvious that the existing administrative machinery could not be geared to achieve them. Thus the wisdom of establishing the Sri Lanka Ports Authority in August 1st 1979 with the principal aim of bringing about a unified system of port administration and which heralded a new era in the realm of port management in Sri Lanka.

This was accomplished by the amalgamation of the CPC a Government Department the P(c)C and the Port Tally and Protective Services Corporation as was referred to in Chapter V with a total cadre of 22,000 personnel and thereby helped avoid duplication of functions.

The Section 6(1) of the SLPA Act defines its objectives and duties as follows:

- a. Provision of efficient and regular services for stevedoring, shipping and transhipping. Landing and warehousing, wharfage, the supply of water, fuel and electricity to vessels, for handling petroleum, petroleum products and lubricating oils to and from vessels and between bunkers and depots, for pilotage and mooring of vessels, for diving and under-water ship repairs and other services incidental thereto;
- b. Provision of efficient and regular tally and protective services:
- c. Regulation and control of navigation within the limits of and the approaches to the ports;
- d. Maintenance of Port installations and promotion of the use, improvement and development of the specified ports etc.
- e. Co-ordination and regulation of all activities within any specified port excluding the functions of the Customs Department;
- f. Establishment and maintenance on and off the coasts of Sri Lanka of such lights and other means for the guidance and protection of vessels as are necessary for navigation in and out of the specified ports;
- g. Performing such other duties as are imposed on the Ports Authority by the Act;
- h. Conducting the business of the Ports Authority in such manner and to make in accordance with this Act such charges for services rendered by the Authority as will

secure that the revenue of the authority is not less than sufficient for meeting the charges which are proper to be made to the revenue of the authority, to replace assets, make new investments and to establish and maintain an adequate general reserve; and

i. Endeavour to manage the specified ports and each of them as self supporting enterprise in accordance with the provisions of the Act.

In terms of section 5(1) of the SLPA Act, the Port Authority has a Board of Directors consisting of:

- a. Chairman and 4 others appointed by the Hon. Minister;
- b. A representative of the General Treasury nominated by the Minister in charge of the subject of Finance;
- c. The Managing Director appointed under section 13 of the Act;
- d. The Principal Collector of Customs; and
- e. A representative of the Ministers in charge of the Minister to whom the subject of fisheries has been assigned and nominated by such Minister.

The Act also provides that the Chairman of the SLPA is the Chief Executive and is in charge of overall administration of the Ports Authority under which came the controlling and operating of the three ports, Colombo, Trincomalee and Galle (Fonseka, 1985).¹⁷

The expectation that the creation of a unified port administration would bring about administrative efficiency, increased productivity, efficient port operations, better labour relations and, above all the modernisation of port facilities to meet the challenges of containerisation were at least proved by the events in the immediate aftermath of the establishment of the SLPA. Most of the achievements were discussed in greater detail in the account dealing with the development of

containerisation from 1977 to 1995. It is unaboidable, however, that some of them to be repeated here as they have a direct bearing on the present discussion as well.

The Authority immediately after its formation gave priority to certain areas as a matter of urgency which Fonseka (Managing Director, SLPA for years) summarised as:

(i) The existing tariff structure was more than 10 years old and the port revenue went to the Consolidated Fund of the government. Funds for maintenance and operations had to be allowed for essential food and other commodities used by the common people, in order to keep down the cost of living. Rebates were also allowed on certain exports as a matter of government policy. Further, in the field of transhipment, competitive rates had to be offered to make Colombo more attractive. A revision of the tariff has subsequently been effected by converting the rupee rates to the dollar rates in order to overcome losses due to the rising parity rate of the dollar.

(ii) The simplification of documentation for improved

efficiency.

(iii) A new wage structure for port employees with sufficiently attractive salaries for professional, management and skilled trades in order to retain these skills in the port.

(iv) Identification of training needs for systematic and

continuous training and the upgrading of skills.

(v) Establishing a new Planning, Research and Development Division (Silva, K.L.P. de "Uninterrupted Progress from Inception in Sri Lanka ports Authority 11th Anniversary, the Island News Paper 1st August 1990). 18

While giving priority for these in order to make the Port of Colombo more attractive in the region, towards the same end there was also the need to exploit all possible avenues to improve the conditions of port employees. It was not forgotten history that the primary cause for many of the port had been its unhealthy environment created by labour problems. A repetition of that situation hence had to be avoided at any cost because apart from their numerical strength labour remained to be a factor to be reckoned with in the efforts to enhance port efficiency and reach realistically the above mentioned objective in a shorter time frame.

Labour and Welfare

The Port of Colombo had been no exception to the general rule among the ports of developing countries employing labour in an extensive scale in cargo handling operations. This remains to be so even at present at Colombo even though what motivated the container revolution was higher level of port efficiency through substitution of labour intensive methods with mechanisation of port operations. A combination of several factors put Colombo to this paradoxical situation of large scale use of labour in the midst of rapid progress in containerisation. For the SLPA this was a feature in the first place, bequeathed to it from the past. Since independence the size of the workforce, especially the dock labourforce as was stated earlier, had not been in any measure proportionate to the volumes of trade and the shipping handled by the Port and, strangely that was despite Sri Lanka moving towards an inward looking economy that reached a climax by the early 1970s.

It would have been rationale to have expected the workforce at the Port to have remained at a uniform level if regulations were presented for the retrenchment of labour. If not there should have been a reduction in the labour force in keeping with the downward trend in the volume of cargo handled by the Port. Contrary to that expectation what in effect happened had

been a gradual growth in the port's workforce except in the years 1960, 1970 and 1977 (see Table 6.2). It, therefore meant that there was apparently excess labour in relation to the volume of cargo to be handled during these years. The sharp fall in the labour category by 1977 had been very largely due to the Incentive Retrenchment Scheme introduced in April 1973 and a total of 2,723 port employees availed themselves of this scheme while the incentive payments paid amounted to Rs. 7,895,649. (P(c)C).¹⁹

Table 6.2

Port of Colombo, Workforce 1958-1977 (for selected years)

YEAR	Labour	Non Labour and Executive Grades	TOTAL
1958	14,122	2,452	16,574
1960	13,761	2,586	16,357
1965	14,280	2,602	16,882
1966	14,550	2,680	17,230
1970	13,386	3,156	16,542
1977	9,215	3,051	12,266

(Source: P(c)C)

Neither did the progress of containerisation of trades reflect a change in the numerical strength of port employees. Rather than a decline, in the years following import liberalisation and the establishment of the SLPA, their numbers increased more than ever before except in some years when a (see Table 6.3) slight drop was seen. A noteworthy feature in that increase in the port employees had been the substantial increase in the non-labour and executive categories of employees. Containerisation which created an increased demand for skilled and technical grade employees and the coming into being of a unified administrative set up covering the entire port system of

Table 6.3

Port of Colombo - Workforce 1977-1994

YEAR	Labour	Non Labour and Executive Grades	Total
1977	9,215	3,051	12,266
1978	11,100	3,069	14,169
1979	10,783	2,982	13,765
1980	14,812	4,533	19,344
1981	13,382	6,154	19,536
1982	12,896	6,248	19,144
1983	12,849	6,297	19,146
1984	12,699	6,607	19,306
1985	12,269	6,695	18,964
1986	12,430	6,967	19,397
1987	12,064	7,177	19,281
1988	10,736	7,580	18,316
1989	11,719	7,028	18,747
1990	8,871	6,973	15,844
1991	9,272	7,217	16,489
1992	8,830	7,351	16,181
1993	8,871	6,973	15,844
1994	8,404	6,967	15,371

(Source: SLPA)

Sri Lanka were very largely responsible for the expansion in those categories of employees. Finally, import liberalisation that brought about a sharp increase in the volume of break-bulk cargo the handling of which also required the maintainance of fairly a large dock labour force. In the ultimate analysis the developments in the Port of Colombo in the post 1977 period enlightened the SLPA that it was in the best interests of the Port as well as the economy at large to maintain healthy relations with a labour force of that size. Reasons such as these not only motivated the Authority to improve upon the existing welfare

measures as well as of introducing further measures towards the same end and stated below are the more important of them:

- i) Supply of free meals to all categories of employees
- ii) Six months special full-pay medical leave to employees who have exhausted all other approved leave.
- iii) SLPA buses at highly subsidised rates for holiday travel etc.
- iv) Encashment of unutilised medical leave
- v) Free medical facilities.
- vi) Loans for the purchase of motor vehicles, motor cycles and bicycles.
- vii) Canteen and rest room facilities.
- viii) Financial assistance and facilities for sports activities.
- ix) Residential quarters at highly subsidised rates.
- x) Employment to children of retired employees.
- xi) Ex-gratia payments upto Rs. 30,000/= in case of death due to natural causes.
- xii) Holiday bungalows.
- xiii) Transport service within the Port.
- xiv) Personal accident insurance scheme.
- xv) Co-operative Bank.

As port employees became beneficiaries of such welfare measures the Port became a more attractive source for employment than before. It may even not be wrong to state that compared with the working conditions of similar categories of employees in other Public Corporations theirs' seemed to be much better and that played an important role in improving port operations. Therefore, it may be pertitent in the present context to elaborate on some of the more important welfare benefits that the Port employees came to be entitled to and their impact on port operations both in quantitative and quantitative terms.

Apart from those over wages, and connected matters another issue that had a bearing on the material well being of port employees in a period of rising inflation had been the supply of meals to port employees. The problem assumed serious proportions by the late 1960s to the extent that it had been a major demand in the port strike began in December 1969 and which lasted till February of the following year. The effects of the strike on the Port were such that it became prudent to bring under the control of the P(c)C the provision of canteen facilities. With that in view a canteen was opened in the Guide Pier in August of the same year and subsequently some more canteens were opened in other units. In addition action was also taken to take over the entire supply of teas/snacks as provided to workers at 4 p.m., 12 mid night, 2.45 a.m. and 6.30 a.m. which had hitherto been entrusted to private contractors. A sum of Rs. 4,649,027/56 had been incurred in the financial year 1970/71 in respect of meals supplied to port employees. Thereafter with the rising cost of food stuffs and with the improvement of the quality of meals and their nutritional value the sums spent on this item of welfare began to rise so much that by the year 1987 the amount spent had risen to a figure as high as Rs. 50.7 million from 5.7 million in 1976 which meant nearly a ten fold increase in ten years. The SLPA records also show that by 1984 the cost of all welfare services including the supply of free meals had amounted to Rs. 116.4 million.(SLPA, A.R 1976, 1984).²⁰ Such information on welfare expenditure by the SLPA shows its commitment to the welfare of labour in order to achieve the desired objective of improving labour productivity. Besides being beneficiaries to a large number of welfare benefits port employees also became entitled to benefit that other employees of Public Corporations received from time to time. One of them was the payment of retirement gratuity under the Payment of Gratuity Act No. 12 of 1983. In that year alone altogether 282 employees availed themselves of that facility on account of which the SLPA spent by the SLPA incurred an expenditure of Rs. 4,015 million (SLPA 1983).21

In addition to loan facilities so provided for the purchase of motor vehicles, motor cycles and bicycles later on a Housing Loan Project was also launched for the employees of the Authority. The project was undertaken with the collaboration of the Housing Development Finance Corporation of Sri Lanka. Employees of the Authority became eligible to draw loans upto a maximum of Rs. 250,000 each. Available data shows that in 1990 alone housing loans to the extent of Rs. 3.9 million had been granted. The SLPA had advanced Rs. 5.0 million to the Housing Development Finance Corporation to meet these payments. The employees were charged a nominal interest of 6% out of which the Authority received 4% while the balance 2% was absorbed by the Housing Development Finance Corporation for its services as commission (SLPA, 1990). No less important were the salary increments granted and salary revisions made from time to time which raised their monthly incomes to an appreciable level. Four salary revisions were being effected between 1964 and 1979 and the revision made in the latter year above gave them a substantial salary increase of 40%.

As anticipated the host of welfare measures introduced were productive of better results by way of winning the goodwill of port employees and from the early 1970s settlements of labour problems through negotiation became the usual practice. Consequently, a port that was plagued with strikes and work stoppages began to progress steadily towards industrial peace thereafter and from 1978 onwards the Port was completely relieved of that problem except in the years 1981 and 1982 when 123,002 and 105,472 man hours respectively were lost due to trade union action (SLPA, 1979-1984).²² The man hours lost during the two years, however, seemed insignificant if a comparison were made with those lost by such action in the period before 1970. In any case that did not damage Colombo's image as a port enjoying industrial peace in considering the fact that in July 1980 whilst a large number of

employees both in the public and the private sectors went on strike not even one out of the total cadre of 22,000 (inclusive of ports of Galle and Trincomalee) of the Authority participated in this strike (SLPA, 1980).²³ That strike which occurred in the immediate aftermath of the implementation of the open economy policy, received the widest publicity and some of the problems that arose from that strike are yet to be resolved. Since 1982 the Port of Colombo was completely spared of disruption of work except in the year 1989 when the whole country was engulfed in work stoppages due to threats and intimidation by the insurgent movement in South Sri Lanka.

The Ports Authority that got off ground in 1979 as the single arm of the government for port management was consequently in a strong position unsurpassed in the past of control over a port sufficiently insulate against strikes and work stoppages. The Authority also through its employee welfare policy brought to its fold a highly motivated workforce in the performance of their duties. That was one of the main causes for the relatively satisfactory level of port efficiency that the Port of Colombo displayed within the hierarchy of regional ports by the early 1980s. So satisfactory was its efficiency that by that time the Port of Colombo showed signs of pull of traffic to it from the weaker regional ports, particularly from the Indian subcontinent. That also signalled Colombo's elevation to the leading port in South Asia. Commenting on the weaknesses of regional ports as against the strengths of Colombo the Lloyds Shipping Economist, for instance, stated that:

"Criticism has also been directed towards the increasing amount of container traffic which is moved by feeder services as opposed to direct calls to and from Indian ports via transhipment centres elsewhere in Southern Asia, notably Singapore and Colombo. The rapid development and progressive attitudes of the Sri Lankan Port, in particular, have done a great deal to pull traffic away from the East, and to a lesser extent West Coast Indian Ports" (Lloyds Shipping Economist 1983).²⁴

It was in a changing scenario as this that the Port of Colombo with the coming into being of the SLPA that once again entered the path to progress to become the foremost transhipment point in South Asia. So much so that in transhipping it trailed only behind Singapore in this part of the Indian Ocean. From the mid 1980s as the port modernisation programme progressed port efficiency also increased at a greater momentum. In the case of cargo handling operations the degree of that efficiency could be measured from the index for stevedoring productivity as prepared by the SLPA. In the six years from 1976 (see Table 6.4) that index rose by 22.1% whereas in the subsequent two years ending in 1984 the figure nearly doubled to 41.2%.

Table 6.4
Stovedoring Productivity Index (1976=100)
Port of Colombo, 1976-1990

YEAR

palling hygus add	
1976	100
1977	108.8
1978	122.1
1979	125.0
1980	125.0
1981	122.1
1982	122.1
1983	129.9
1984	141.2
1985	138.2
1986	152.9
1987	152.9
1988	175.1
1989	160.3
1990	164.7
(Source: SLPA)

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The greater use of the Port of Colombo by different types of vessels for different purposes can also be attributed among other things to the availability of cargo, the improved port facilities and the level of efficiency attained in the handling of shipping. As referred to earlier these requirements have not been found wanting by international shipping circles and, moreover, the achievements in such spheres of port operations are being supported by statistical evidence. The average waiting time service time and turn round time for vessels had improved remarkably after 1980, except, however, in the latter part of the 1980s (see Table 6.5) when there had been a slight decline port efficiency though of course not to the extent that it had been during the very unsatisfactory years from 1976 to 1980. In fairness to the SLPA it may be said that any decline in the efficiency of shipping operations that was experienced during these years was not a reflection of weaknesses in management. The latter part of the 1980s coincided with further liberalisation of trade and consequently the tonnage of cargo including break-bulk the handling of which is labour intensive as well as the number of vessels with cargo calling at the Port grew remarkably. Moreover, the statistics exclude containers, bulk carriers etc. and hence do not provide a true picture of ship handling efficiency in general. Even then the average tons per ship per hour is sufficient proof of the fact that there had not been a setback in shipping operations as the statistics apparently suggest.

The data pertaining to container traffic at the Port of Colombo, on the otherhand, more than strengthens this argument. The sole reason for the Port to reach a pivotal position in South Asia had been due to no other reason than its attraction as a transhipment centre. in an era when the container shipping enterprise in the search for reduced voyage cost through less diversion selected base ports through which feeder lines to operate, Colombo, in the region emerged as one of them. The criterion in the choice of base ports being

YEAR Average waiting, service and turn round time per ship and average tons/hours per ship at berth, YEAR Average waiting time (berthing) Average ship and average tons/hours per ship at berth, YEAR Average waiting time (berthing) Average ship and average tons time (Commencement to cound time) Average tons G976 20.1 (Commencement to Completion) Competion) Tons/Hour* G978 20.1 123.2 143.3 17.4 G978 20.1 123.2 143.3 17.4 G978 35.4 155.3 17.4 17.0 G978 135.3 174.9 17.4 G979 155.3 17.4 17.4 G978 155.3 17.4 17.0 G978 135.3 17.4 17.0 G979 16.3 17.4 17.4 G98 16.3 17.6 17.1 G98 16.4 17.6 17.1 G98 16.4 17.4 20.1 G98 16.4 16.9 27.3 <t< th=""><th></th><th></th><th>Table 6.5</th><th></th><th></th></t<>			Table 6.5		
R Average waiting time (Commencement time (berthing) Average vaiting time (Commencement time (berthing)) Average turn time (berthing) to commencement to commencement to commencement to commencement to completion) Hours/Ship * Hours/Ship * Hours/Ship * Hours/Ship * Hours/Ship * 20.1 123.2 144.3 20.1 155.3 174.9 26.9 137.1 164.0 36.3 140.3 176.6 16.3 127.2 144.9 36.3 140.3 176.6 16.3 127.2 144.5 16.3 127.2 144.5 8.0 118.4 126.4 8.0 118.4 126.4 10.8 99.1 109.9 10.8 99.1 109.9 10.8 99.1 109.9 20.5 120.1 140.7 24.3 117.5 141.9 N.A N.A N.A N.A	Average	vaiting, service and turn		erage tons/hours per sl	hip at berth,
Completion) Hours/Ship * Hours/Ship * 20.1 123.2 143.3 57.4 155.3 212.7 39.6 137.1 174.9 26.9 137.1 164.0 26.9 137.1 164.0 26.9 137.1 164.0 26.9 137.2 144.9 8.0 118.4 126.4 8.0 118.4 126.4 8.0 118.4 126.4 10.8 99.1 109.9 10.8 99.1 109.9 10.8 99.1 109.9 10.8 119.4 139.9 20.5 120.1 140.7 20.5 120.1 140.7 24.3 117.5 141.9 N.A N.A N.A N.A N.A N.A	YEAR CHARGON AND C	Average waiting time (berthing) to commencement	Average Service time (Commencement to Completion)	Average turn round time (Berthing to	Average tons (Commencement to Competion)
20.1 123.2 143.3 57.4 155.3 212.7 39.6 135.3 174.9 26.9 137.1 164.0 36.3 140.3 176.6 116.3 127.2 143.5 16.3 127.2 143.5 16.3 127.2 143.5 110.8 99.1 109.9 10.8	en con con con con con con con con con co	Hours/Ship *	Hours/Ship *	Completion) Hours/Ship *	Tons/Hour *
57.4 155.3 212.7 39.6 135.3 174.9 26.9 137.1 164.0 36.3 140.3 176.6 16.3 127.2 143.5 16.3 127.2 143.5 16.3 115.6 123.2 8.0 118.4 123.2 10.8 99.1 144.6 10.8 99.1 109.9 10.8 99.1 109.9 10.8 99.1 109.1 10.8 137.6 165.3 20.5 117.4 139.9 20.5 120.1 140.7 24.3 N.A N.A N.A N.A N.A N.A N.A N.A N.A	92615	20.1	123.2	143.3	17.4
39.6 135.3 174.9 26.9 137.1 164.0 36.3 140.3 176.6 16.3 127.2 143.5 16.3 127.2 143.5 16.3 115.6 123.2 8.0 118.4 126.4 8.0 118.4 126.4 10.8 99.1 109.9 10.8 99.1 109.9 10.8 99.1 109.1 10.8 99.1 109.1 10.8 99.1 109.9 10.8 109.4 139.9 20.5 119.4 139.9 20.5 117.5 140.7 24.3 117.5 141.9 N.A N.A N.A	LL612	57.4	155.3	212.7	15.8
26.9 137.1 164.0 164.0 165.3 165.3 165.0 176.6 1	8791978	39.6	135.3	174.9	17.0
36.3 140.3 176.6 176.6 176.7 176.6 176.7 1	61615	26.9	137.1	164.0	17.4
16.3 127.2 143.5 156.4 15.6 118.4 123.2 123.2 126.4 126.4 126.4 126.4 126.4 126.4 126.4 126.4 126.4 126.4 126.4 126.4 126.4 126.2 120.1 126.4 126.3 120.1 126.3 120.1 12	08610	36.3	140.3	176.6	17.0
7.6 115.6 123.2 8.0 118.4 126.4 5.2 144.1 149.3 8.4 136.2 144.6 10.8 99.1 109.9 10.8 99.1 109.9 10.8 99.1 109.1 10.8 108.9 165.3 20.5 119.4 140.7 24.3 117.5 141.9 N.A N.A N.A N.A N.A N.A N.A N.A N.A	186 ana	16.3	127.2	143.5	17.1
8.0 118.4 126.4 5.2 144.1 149.3 8.4 136.2 144.6 10.8 99.1 109.9 10.8 99.1 109.9 10.8 108.9 128.7 28.1 137.6 165.3 20.5 119.4 140.7 24.3 117.5 141.9 N.A N.A N.A N.A N.A N.A N.A N.A	m1982	7.6	115.6	123.2	19.4
5.2 144.1 149.3 8.4 136.2 144.6 10.8 99.1 109.1 10.8 99.1 109.1 10.8 108.9 128.7 28.1 137.6 165.3 20.5 119.4 139.9 20.5 120.1 140.7 24.3 117.5 141.9 N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A	P1983	8.0	118.4	126.4	20.1
8.4 136.2 144.6 10.8 99.1 109.9 10.8 108.9 109.1 108.9 108.7 28.1 137.6 165.3 20.5 119.4 139.9 141.9 N.A	1984 1984	5.2	144.1	149.3	20.9
10.8 99.1 109.9 10.8 108.9 1109.1 19.8 108.9 128.7 28.1 137.6 165.3 20.5 119.4 139.9 20.5 120.1 140.7 24.3 N.A	S86 lion	8.4	136.2	144.6	21.8
10.8 99.1 109.1 109.1 108.9 128.7 128.7 128.7 150.5 119.4 139.9 140.7 140.7 141.9 N.A	1986	10.8	99.1	6.601	27.3
19.8 108.9 128.7 28.1 137.6 165.3 20.5 119.4 139.9 20.5 120.1 140.7 24.3 117.5 141.9 N.A N.A N.A N.A N.A N.A N.A N.A	1987	10.8	99.1	109.1	27.3
28.1 137.6 165.3 165.3 20.5 119.4 139.9 20.5 120.1 140.7 24.3 117.5 N.A	1988	19.8	108.9	128.7	29.3
20.5 119.4 139.9 20.5 120.1 140.7 24.3 117.5 141.9 N.A N.A N.A N.A N.A N.A N.A	1989	28.1	137.6	165.3	27.2
20.5 120.1 140.7 24.3 117.5 141.9 N.A	1990	20.5	119.4	139.9	32.9
24.3 117.5 141.9 N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A	1991	20.5	120.1	140.7	32.8
N.A	1992	24.3	117.5	141.9	27.4
N.A N.A N.A N.A N.A N.A	1993	N.A	N.A	N.A	N.A
N.A N.A N.A	1994	N.A	N.A	N.A	N.A
	1995	N.A	N.A	N.A	N.A

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* Exclusive of containers, bulk ships and lash large carriers.

efficiency, it was that more than Sri Lanka's locational advantage which made international shipping to select Colombo as a base port for feeder services. The average waiting time, the average service time and the average turn round time per container vessel that was 9.4, 27.9 and 37.3 hours respectively for the year 1980 declined appreciably thereafter with the enhancement of efficiency in shipping operations. Notwithstanding the greater increase in ship arrivals by 1992 with the liberalisation of shipping in 1990 the vessel time spent under each of these headings had declined to 7.0, 18.3 and 23.3 hours respectively (see Table 5.12) Chapter V). The most spectacular gain which speaks very highly of Colombo's achievements with respect to containers had been the average tons per container vessel per hour which rose from 40.6 in 1980 to 72.3 in 1984, to 179.3 in 1987 and to the very high level of 208 in 1992.

These no doubt are remarkable achievements by a public Authority in Sri Lanka in a matter of little more than ten years whilst at the same time inheriting a complicated system of port administration. Besides putting the complicated administrative structure into a coherent form the Authority also had to go through difficult times incomparable in Colombo's existence as a modern port as it had to undertake the difficult task of equipping the Port with facilities involving heavy capital investments to receive containers.

Modernization of Cargo Handling and Shipping Operations

The efforts of the SLPA in the sphere of labour management were productive of better results in a short period of time and as compared with the earlier period when Colombo had gained notoriety for labour unrest. In contrast port operations now began to be done by a discipline and a motivated labour force with remarkable effciency. Although that could be considered as a great achievement by the Authority that alone was not the

factor which yielded the results as demonstrated in Tables 5.12 (Chapter V) and 6.1. Perhaps the most outstanding achievement of the SLPA was the transformation of Colombo from a lighterage port engaged almost entirely in stream discharge of cargoes to a modernised port with alongside berthing facilities. That transformation which was accomplished by 1995 through the provision of container and related facilities, about which enough had been said in the preceding chapter, enabled Colombo to reach international standards.

The development of container facilities at the Port was dealt with at length in the preceding chapter. But it is of some relevance here to discuss the circumstances under which the SLPA was called upon to undertake the task of providing such facilities within a short time frame. From the outset although the SLPA realised that modernisation was a pre-requisite to enhance port efficiency in order to meet the demands of international ocean transportation, the Authority unfortunately was severely handicapped by the problem of funds to achieved that objective. To illustrate the severity of the problem a capital it may be repeated of the very slow progress that the Port made in the provision of a container berth of 1000 m. in length that was commenced construction in mid sixties but only 450 m. of it saw completion by 1977. By the time that the Authority was formed Colombo was beginning to feel the thrust of container trafic and the Authority with wide powers was able to take meaningful steps to deal with the immediate situation and by 1980 the remainder of the quay length was completed (SLPA 1979).25

However, when the need for heavy capital investments was being felt from the early 1980s the infant SLPA was unable to meet that demand even though the Act clearly stipulates that the Authority should endeavour to manage the specified ports and each of them as self supporting enterprises (SLPA, Annual Reports). Although the revenue of the SLPA had been

increasing during the 1980s, the net profit had not increased significantly to make the Port to bear the total cost of port investments. Despite the rapid strides made in cargo throughput and in transhipment business in the 1980s the SLPA was not in a financially strong position to make heavy investments on port development by itself. For example the net profit after provision for taxation which was Rs. 254.4 million in 1988 rose only to Rs. 576.4 million by 1991. (The Island January 22, 1997)²⁶ Even otherwise the revenue surpluses in rupee terms were of trivial importance in relation to the large investment needs because of the fast falling par value of the rupee with other currencies. Consequently, like most public enterprises of the country, the SLPA too had to look forward to the Treasury for funds. Fortunately for the Authority, it came into being during a period of a government that was firmly committed to develop the transport infrastructure of the country with the primary objective of making the new economic strategy - the open market economy policy - a success. Consequently, with the blessings of the government the Authority was able to negotiate, as pointed out earlier, a number of soft loans as well as the necessary expertise from Japan to carry out a massive port development programme with the main focus on the provision of container facilities. Thus the JCT I, and II were completed by 1987 and the JCT III and IV begun construction thereafter became operational in February and April 1995 respectively. At the same time as was stated in the previous chapter, the SLPA with its own financial resources also undertook port development projects to supplement those accomplished with Japanese loans. The Japanese Government also, according to media reports, had signed a soft loan agreement in 1995 for seven billion rupees for the development of the QEQ. The port development programme so undertaken in May 1983 by a Japanese firm of construction and completed in stages by 1995 can be considered as a historic achievement by the SLPA during the short period of 12 years to place Colombo in a unique position in container handling in the region. In scale, it perhaps surpassed the first ever port development programme launched in British Colonial times (1875-1911) to convert the open roadstead to an enclosed lighterage port through the construction of three Breakwaters. Stated broadly the port infrastructure development programme executed between 1979 and 1995 created a watershed in the annals of the Port of Colombo by breaking away from its past. That programme of port development transformed Colombo that was generally dependent on stream discharge of cargoes to a modernised port with a significant number of alongside berths installed with modern equipment. An equally noteworthy development was the fact that the development of container facilities made the jurisdiction of port operations spread well beyond the harbour area and began to embrace a wider spectrum adding complexity to port administration/ management.

The responsibility of the SLPA was not confined to the creation of an efficient administrative infrastructure in place of the out of date administrative machinery which replaced it and which was not vested with responsibility to prepare the Port to meet the challenges coming from the changes in maritime transport. The most difficult task that fell on the Ports Authority was planning to meet the current and future demands of the Port of Colombo. That essentially entailed physical planning and infrastructure development. As things were the immediate task to be undertaken was to prepare Colombo to meet the oncoming challenges of containerisation. But that involved detailed planning, large scale capital expenditure and the supply of technical expertise for which the Authority, as could be expected was not resourceful enough.

Financial Management

In addition to promoting industrial peace in a port menaced by strikes another important aim of the nationalisation of the ports of Colombo, Galle and Trincomalee was that these ports would cease to be a financial burden on the General Treasury. But the financial performance of the P(C)C proved to be otherwise as it had been a story of losses. From 1962 onwards and with the nationalisation of ports of Galle and Trincomalee the losses, as evident from official records, had been escalating. The cumulative losses incurred by these two ports from 1970 to 1974 amounting to Rs. 48.2 million for example (see Table 6.6) are explanatory of the Corporation's weak financial position. As these amounts were not reimbursed by the government, the financial position of the Corporation had been severely affected.

Table 6.6

Losses, Ports of Galle and Trincomalee 1970-1974.

YEAR	Galle Rs. Million	Trincomalee Rs. Million	Total Rs. Million	
1970/71	2.3	6.9	9.2	
1971.08.01 to				
1971/12.31	1.0	2.9	3.9	
1972	2.7	8.3	11.0	
1973	2.9	8.4	11.3	
1974	3.2	9.6	12.8	
Total	12.1	36.1	48.2	

(Source: P(c)C Annuals.)

Neither did the financial position of the Corporation improve thereafter. The amounts paid to the creditors and accrued charges which had been increasing yearly had stood at Rs. 67.3 million by the end of 1976. (P(c) C 1975).²⁷ The hopeful expectation of an improvement in the financial situation of the P(c)C and the possibilities of settling the arrears

of payments to the creditors by 1977 unfortunately have not materialised. Instead the P(c)C by that year had an accumulated loss of approximately Rs. 111.4 million of which Rs. 8.2 million, Rs. 21.1 million and Rs. 72.1 million were cumulative losses incurred by Colombo, Galle and Trincomalee respectively. (P(c)C 1977).28 Much of the poor financial performance of the Port is attributable among other things to the lacklustre growth in trade and shipping in Sri Lanka from the late 1950s to late 1970s and the persisting problems of the Port as discussed earlier. With the reforms introduced after 1977 particularly with the introduction of the open economy policy and the setting up of an autonomous body to manage the affairs of the Port, Colombo rather than a financial liability became a commercially viable port although the net revenue earned as mentioned earlier was not able to meet the financial commitments required to provide container facilities. Nevertheless, it is to the credit of the SLPA that as demonstrated in Table 5.22 of Chapter V that the net profits after taxation had increassed from a mere Rs. 172 million in 1980 to Rs. 453 million by 1993. More importantly for a country faced with an acute foreign exchange problem the SLPA in that respect turned out to be an important asset. The foreign exchange earnings, mainly through the rapid development in the transhipment trade which followed the improvement in port efficiency brought about by industrial peace and the development of container facilities increased to Rs. 3,649 million in 1993 from Rs. 408 million in 1980 and both speak complimentary terms of the SLPA's financial management (SLPA). It is on record that the improved financial performance of the port since the early 1980s was attributable to the increase in operational revenue.

Thus what emerges from the performance of the SLPA as discussed in the previous and the present chapter is that the SLPA is a story of success which is being supported by the findings of the World Bank as quoted below.

"The Sri Lanka Port Authoroty (SLPA) is a success story. It was established in 1979 as an autonomous entity to be responsible for all port management and operations; since then, SLPA has treamlined Colombo's port operations and efficiently handled, especially container traffic which has been increasing at an impressive rate: from 7,500 TEU in 1978 to nearly 400,000 TEU in 1987. SLPA's surpluses have followed the growth in traffic; after taxes, they increased from Rs. 40 million in 1979 to Rs. 432 million in 1986. This success has been partly due to the strategic location of Colombo's port in the intertwining shipping routes especially in transhipment container traffic serving the Eastern, Western and Southern hemispheres of the world - and, perhaps more importantly, the Government's commitment to providing SLPA a high degree of autonomy that enabled it to embark on various development activities and to improve port services and revenue earning potential, thus competing effectively with other ports in the region.

Notable examples of the improvements being made by the SLPA include simplifying documentation requirements and clearance procedures in cooperation with the Customs Department to align the flow of goods and information; continually upgrading and modernizing in response to the changing market demands and computerising in ship planning, yard operation, stock control, billing and the Management Information System, and providing ambitious training programs to upgrade all levels of personnel through modern teaching aids and computerised simulation techniques. The success that this once-inefficient Colombo Port achieved in less than a decade clearly demonstrates that institutional problems can be overcome in a relatively short period of time when there is a clear will and a firm commitment to embark on needed reforms.

In recent years, the PIP in the port's subsector has been dominated by the development of Colombo Port under

Japanese financing. The Phase II development has been completed at a cost of US \$95.4 million. In the next five years, the government of Japan is financing the construction of a new port access road, estimated to cost US \$8.6 million, and the procurement of a container crane (US \$6.4 million) to be installed at Queen Elizabeth Quay (QEQ). These investment components are in accordance with the Port Master Plan prepared in 1980, with the assistance of the Government of Japan.

The new port access road, which would bypass the City of Colombo, will link the Port with the main arterial roads. When completed in 1989, it will contribute to improved traffic conditions in the Port area by filtering heavy vehicles out of the city streets, while providing a fast, high capacity link between the Port and the Inland Container Depots (ICDs) and warehouses feeding the Port" (Document of the World Bank Asia Country Department, pp. 58-59, 1988).²⁹

Despite its inability to meet the heavy investment demands of the Port, the SLPA had been able to maintain its financial buoyancy and showed revenue surpluses uninterruptedly from the very inception in 1979. Significantly this the Authority was able to achieve when the ports of Trincomalee and Galle coming under its authority were making substantial losses (see Table 6.7). The losses incurred by the two ports between 1987 and 1990 it had bee alleged were due to unsettled conditions in the country, the reduced cargo handling because of civil disturbances.

Whatever, the reasons may have been for these losses, the SLPAs financial accounts show that by 1994 the cumulative losses by the two ports Trincomalee and Galle had been Rs. 297.5 million and Rs. 307.8 million respectively. In effect it meant that while subsidising a sum of Rs. 605.3 million to the two ports, the Port of Colombo continued to be a valuable financial asset to the country which itself is a compliment to the SLPA.

Table 6.7

Profits and Losses Ports of Galle and Trincomalee 1980-1994 (Rs. Million)

YEAR	Galle	Trincomalee
1980	- 6.44	- 10.1
1981	- 12.0	- 1.7
1982	- 16.7	- 14.7
1983	- 17.3	- 17.3
1984	- 19.1	- 0.2
1985	- 17.5	- 14.4
1986	+ 2.6	+ 10.6
1987	+ 4.9	- 8.0
1988	- 8.0	- 17.4
1989	- 2.4	- 2.7
1990	- 11.5	- 14.2
1991	- 17.4	- 26.5
1992	- 23.4	- 22.3
1993	- 29.5	- 40.8
1994	- 16.8	- 25.4

(Source: SLPA)

Chapter VII

Port of Colombo: Problems and Prospects

As has been highlighted in the preceding chapters, the greatest achievement of the SLPA, is not only of reviving Colombo's foremost position as a centre for transhipment but of elevating it to the premier Port of South Asia. A Port which in the 1950's and the 1960s had gained notoriety for labour disputes delay in handling of cargo and the resulting long queues of ships outside the harbour was elevated to the best port in South Asia in a matter of few years. The improved labour relations together with the modernisation of port facilities with Japanese assistance, particularly the construction of the JCT not only helped Colombo to gain international reputation but also made capable of handling container vessels growing in numbers and the increased volumes of trade generated. by the economic reforms of the post-1977 period. As publicised by media reports the facilities which are available at the JCT are such that the JCT is now synonymous with the Port of Colombo. (The Island, January 22, 1997).1 The reason being that if not for the JCT the technically advanced big lines may not have started patronising the Port in spite of its geographical location. So much so that the Port is getting established as a regional hub port. Besides, a recent study by Dasanayake brings out certain strengths of Colombo which could enable Sri Lanka to become a major shipping centre for South Asia based on the Port of Colombo.

The supreme strategic hub location in the main sea-routes of the Indian Ocean, according to the study, qualifies Sri Lanka to become the main hub port for the South Asian region. Based on the locational advantage, the Port of Colombo already provides services to almost all the main shipping lines operating in the Asia-Europe, Europe-Pacific Rim (including Australia) and Africa Far East sea routes. The feeder network is also reasonably developed, linking regional ports to Colombo. The comparatively low cost Sri Lankan labour, on the otherhand, holds a strong attraction for shipping and related industrial activities for maritime nations with a shortage of labour. A number of shipping related schools have emerged in Sri Lanka to satisfy the demands of the sea-going labour market which in the past has been dominated by Chinese and Philippines' labour. Sri Lanka's low cost sea-going labour may bring more employment opportunities in that market and also more skills to its maritime industry.

The price of real estate seems to be another factor, which encourages the relocation of maritime activities from the western world. Compared with the Far-East and the Persian Gulf maritime countries, Sri Lanka's real estate prices are very low. Therefore, Sri Lanka has greater potential in attracting maritime activities from the Far East, Singapore and other high-cost countries such as the countries in the Persian Gulf. Some shipping companies have already shifted their bases from the East to Colombo.

In comparison with the South Asian and Persian Gulf seaports, Colombo's infrastructure and superstructures of the Port of Colombo are well advanced. This has given Colombo the reputation of being the most efficient hub port in South Asia. Sri Lanka's strengths also include the throughput capacity, the availability and quality of cranes, the short handling times, the stacking capacity, better dwelling times and the availability of equipment capable of handling post-Panamax container vessels.

Located alongside the commercial, financial and the administrative capital of the island the Port provides easy access to a host of economic activities. Moreover, the development of the Port and the city were intertwined in Sri Lanka. For centuries, the development of the whole island had

a strong urban centrality, Therefore, most of the transport modes, including air, road and canals are all focussed on Colombo. The government administrative machinery, commercial, shipping, private sector business and financial machinery are centred on the City of Colombo. This is an advantage that creates more economies of scales for Colombo, than for Galle or Trincomalee. The City of Colombo has provided logistic facilities to the shipping community for centuries, and a professional logistic shipping circle has developed within the City of Colombo. Furthermore, within Colombo, industries induced, attracted, and generated by the Port are well-developed. An international airport and export processing zones are located close to the Port of Colombo.

The government backed SLPA administrative structure guarantees state support for most of the activities in the seaports and besides ensures checks and balances in various procedures. Compared with most developing countries, Sri Lanka's legal, educational, administrative and other institutional structures and capacities are well organised. Most international conventions and agreements with respect to maritime and port industries have been adopted and honoured by Sri Lanka. It has been found that Sri Lankan shipping and ports are always willing to adopt new concepts. Colombo as was mentioned earlier was the first seaport for example, in South Asia to accept containerisation, despite the huge investment required and the high risk involved.

The existing diversity and the complementarities of the countries in the East, South East and South Asia, moreover, result in considerable potential for economic co-operation and development. Assuming that the current trend of Asian economic co-operation prevails, the regional co-operation among the Asian countries could be a greater certainty. At present, the South Asian Association for Regional Co-operation (SAARC) in particular has been promoting economic social

and trade co-operation. The South Asian Preferential Trade Agreement (SAPTA) aims to expand intra-regional trade and Sri Lanka being an active member of the SAARC will strengthen the role of Colombo as a transhipment point. The other developments that are likely to stimulate the business climate of Sri Lanka which would eventually lead to stimulate the development of the Port of Colombo are further liberalisation of trade and shipping. (Dassanayake, 1997-138-142).²

The tariff structure with concessionary rebates and navigation dues also has proved to have been an incentive to attract shipping to Colombo. Considered in terms of quality of services, some of Colombo's port charges as by mid 1990s were found to be cheaper than those of nearby ports (See Table 7.1). True that the total port charges per vessel are a little higher than that of Singapore which, is understandable, but is very much lower than that of Madras (Chenai) which lags behind Colombo in updating its port facilities.

Table 7.1
Comparison of Seaport changes and dues of regional ports 1994
(US\$)

Category	Colombo	Madras	Singapore (Chenai)	Khalid	Fujariah
Port Dues	1030	1448	1156	736	817
Light Dues	773	-	CUE JUIC BIZZA	750	245
Pilotage	1110	1960	493	250	545
Moorings	587	-		20	150
Tugs	584	1543	192	381	817
Berthing	500	and he	1413	109	163
Total per Ves	ssel 4584	4991	4254	2446	2737

(Source: SLPA and JICA Reports)

Handling charges for transhipment TEUs at the Port of Colombo in the post 1977 period have been least expensive. A comparison made by the JICA in 1991 (see Table 7.2) for example indicates how cheaper was the rate at Colombo in the early 1990s, (JICA 1991 7-4)³ compared with those levied by the Ports of Singapore, Fujairah and Madras (Chenai). (JICA 1991, 9-4; OCDI/JPC 1995)⁴

Table 7.2
Comparison of Dues on Transhipment, Loading/Unloading per 20'TEU-US\$

Qaboos	Fujairah	Pakkan	Khalid	Rashid	Singapore	Colombo
39	114	123	123	125	102	52

(Source: Appendix ii 7-4-Final Report, The Study on the Development of Galle in the Democratic Socialist Republic of Sri Lanka, November 1991, JICA)

These advantages that Colombo enjoys as well as the modernisation of port facilities and the level of port efficiency that was achieved in comparison with the pre 1977 period speak well of the management skills of the SLPA under the able guidance of a Minister in charge of the subject of Ports and Shipping who had a great vision for the future of Colombo. It is Sri Lanka's good fortune that in less than a decade his vision became almost a reality about which much had been said earlier in this study. Colombo not only occupies a position of a hub port in South Asia but also displays great potential for elevation to a hub port in the international container network.

Nevertheless, Sri Lanka must not be over confident about the achievements of its premier port, Colombo, because fortunes and relative positions of ports change over time. Similarly the technology of maritime transportation had also been changing over time and the destiny of ports to a great extent depends on the ability to keep pace with such changes. This is particularly so when ports within a region compete among themselves to attract shipping for services.

The Changing Regional Scenarios

Colombo's rise to pre-eminence in South Asia in the 1980s was due largely to its faster adaptability to containerisation in contrast to most of its rivals. This may, perhaps, not be a permanent feature as many of Colombo's competitors in the region have been investing heavily on the development of container facilities in which they have been making steady progress since the late 1980s. To meet the demands of growing overseas trade accompanying the restructuring of their economies. Forecasts by the IMF suggest that in the years to come India, Pakistan and Bangladesh would experience an acceleration of their overseas trade. According to the projected figures of exports and imports, India's exports would increase from US \$ 20,816 million in 1993 to US \$ 39,753 million by the year 2000 which amounts to a 91% increase in seven years. The value of exports of Pakistan during the same period is estimated to increase from US \$ 9,833 million to US\$ 18,502 million. On the otherhand the projected value of exports of Bangladesh is estimated to be US\$ 5,202 million in the year 2000 from US\$ 2,230 million in 1993 which is equivalent to a percentage growth of nearly 133 (See Table 7.3). While the projected growth in the value of exports in these countries is dramatic that of imports is more dramatic (Kamalgoda, 1995-7-5).5

Similar trends in the overseas trade are more or less true of the Asian Region as a whole. Nevertheless, the East Asian economies which have successfully evolved from inwardlooking protectionist trade regimes to relatively open economies have shown a much more remarkable growth in overseas trade, than their South Asian counterparts.

Table 7.3
Projected Exports & Imports (Value in US\$ Mns.)

2000	5202 5090	39753	20446	1446
1999	46009	36244 29823	17920	1195
1998	4084 4705	33044	15706	987
1997	3619 4523	30127 27335	13766	815
1996	3206 4348	27467	12065	674 949
1995	2841	25042 25054	10574	557
1994	2517	22832 23986	9268	460 837
1993	2230	20816 22963	8123	380
1992	2095	19352 23326	7143	369
1991	1605	15533	6286	230 661
1987 1988 1989 1990	1617	11376 12355 15123 17398 16793 17856 19613 22886	5540 7312	203
1989	1305	15123	4511 6836	150
1988	1269	11376 12355 16793 17856	4361	176 628
1987	1059 2695	11376	4159 5805	152 576
	BANGLADESH Export	Books and an	Exports	NEPAL Exports Imports

Notes.

1. Projected exports are based on the Trend Line method

2. Projected Investments are based on Investment/GDP ratios.

Commenting on the export sector performance of the former group of the "East Asian Miracle" published by the World Bank in 1993 says that "rapid growth of trade is one of the common typical performances of high performing Asian economies (HPAES) which include Japan, Hongkong, the Republic of Korea, Singapore, Taiwan, Indonesia, Malaysia and Thailand. What is common to all these countries is the fact that either they are island nations like Sri Lanka or peninsular nations like Malaysia that are completely or largely surrounded by sea which they have exploited for their advantage by promoting exports. But in the case of Sri Lanka the "East Asian Miracle" (1993) observes that Sri Lanka despite its island location has still to exploit that position fully to her advantage through export promotion (OCDI/JPC, 1995,3).6 The most plausible way of achieving such an objective seems to be through further expansion of port facilities and maintaining a high level of port productivity. The trends in the overseas trade of the countries of Asia signals accelerated shipping capacity and services to cater to a massive growth in container traffic within the Asian region. An equally important development that calls for Sri Lanka's serious attention is that most ports in Sri Lanka's immediate and distant neighbourhood which are Colombo's potential competitors are also investing heavily on port development projects with the primary objective of meeting the demands of containerisation.

Singapore which will continue to be the strongest competitor for Colombo's transhipment market in the east-coast Indian ports and Bangladesh for example has been in the forefront of such investments. The PSA invested US \$ 823 million over the period 1988-92 to upgrade equipment, provide additional facilities at the World Trade Centre and the Singapore Cruise Centre, convert conventional berths for container operations, provide traffic information systems and enhance computer facilities as well as undertake port related developments. Projects in progress as of December 31, 1992 were valued at

US\$ 1,7000 million in which the more important ones were the conversion of conventional berths and the construction of new container facilities, equipment purchases, the installation of a traffic information system and ship simulator. It is estimated that over the period 1993-1997 more than US\$ 1,280 million was expected to be invested in the development of eight new berths and the purchase of related equipment. Moreover, while remaining under public sector control Singapore has allocated preferential berths to major shipping lines through agreements which guarantee minimum throughput. For the purpose of further improving port efficiency through minimising documentation delays the Electronic Data Interchanges System (EDI) facilities are said to be exploited to the maximum level at Singapore.

The immediate challenge to Colombo's present position nevertheless comes not from Singapore but from the Indian and Gulf Ports. India invested US\$ 620 million in port development projects over the period 198-1992 of which 80% was on the Jawaharlal Nehru Port (Nhava Shiva) in Bombay (Mumbai). It is estimated that when the JNP is completed in the year 2000 it will be capable of handling more than 600,000 TEU's per annum (Kamalgoda, 1999. 7-15).7 The other Indian ports earmarked for development with private sector/foreign involvement are Madras (Chenai), Tuticorin, Cochin Bombay (Mumbai) and Vellapatnam. Over the coming five years a wide range of development and modernisation projects are planned in nearly all of the major ports. With the two new container factories near Madras (Chenai) area it is anticipated that the container traffic handled by the port will continue to grow in a considerable way. Container throughput at that port exceeded 130,000 TEU's during the 1992-1993 fiscal year and were up 23% on the 108,000 TEUs processed in 1991-92. The projected container throughput for Madras (Chenai) for 1996 was 300,000 TEUs. It is reported that the Madras (Chenai) Port Trust is also pushing ahead with a long-planned expansion of

its container quay. Work is also in progress at the Egmore satellite port. (The Island, February 10, 1997)⁸

Other south Indian ports at Cochin and Tuticorin also saw a surge in box traffic handled in recent years. In the fiscal year 1992-93, Cochin, for example, handled 543,000 TEUs which is equivalent to a 15 % growth over the previous year. (Kamalgoda, 1995, 7-15).9 The economic liberalisation programme launched by India has resulted in large scale investments on port development to provide facilities for third and fourth generation container vessels which no doubt will lead to a growth in India's box traffic. It is expected that port development projects together with the economic liberalisation programme set in motion will attract foreign investors to India's large market (population 913.6 million) with an abundant supply of raw materials and cheap labour. Whereas Sri Lanka's market with around a population of 18 million in comparison is trivial. India, therefore, with a population of such size is very likely to make its ports capable of guaranteeing sufficient amounts of cargo, and there is the probability of main liners calling at them.

Apart from Singapore and those of India there are also the other distant regional competitor ports in the Gulf-region and the Middle East such as Qaboos, Mina Raysat, Fujairah, Khorfakkan, Khalid, Damman Rashid and Aden which have also made massive investments on port infrastructure development. Most of these strategically located ports in that part of Asia have agreed to allow the main lines operating in the region to develop their own transhipment berths on the basis of BOT.

Future of Transhipment

The development of a feeder network with the countries of the region other than with Singapore had been a very

significant factor for Colombo's speedier revival as the premier for transhipment centre in South Asia. To what extent the Port of Colombo could maintain that position, however, has now become a matter for serious concern in view of the developments in containerisation taking place in the region. In this regard it has to be reiterated that Singapore, is acclaimed as one of the best transhipment ports in the world which already occupies an unrivalled position in the Indian ocean. The bulk of east coast transhipment market of India which the Port of Colombo would have access to is almost wholly controlled by Singapore. Hence it is most unlikely that Colombo could challenge Singapore's dominance in transhipment business unless the quality of services are improved to be on par with Singapore which as things are will be an uphill task. Colombo's future prospects, as a transhipment hub in South Asia, therefore, has to be analysed in relation to the other prospective competitor ports in the region. Sri Lanka's major advantage in it which is its strategic location in the network of sea lanes in the Indian Ocean vis-a-vis most other ports in South Asia still remains intact or in a sense is further enhanced.

With the emergence of container mega carriers on all major sea routes the strategically located ports in every region began to gather more importance as transhipment centres. Consequently, Sri Lanka's locational advantage, as stated above provides Colombo the great potential to become the main port for long distance and for regional transhipment trade flows to Indian ports in the west coast and to some extent in the east coast, Bangladesh, Pakistan, the Persian Gulf and some East African and Pacific Rim countries. Within the region, Singapore and some Persian Gulf ports are the main competitors of Colombo in the Far-East-Europe sea routes.

The future of transhipment in this region also depends on the economic growth and industrial development of the relevant countries and on international and regional trade flows which in turn can influence Colombo's fortunes in this branch of business. The projections made for the year 2000 show that the Port of Colombo is expected to handle 1.5 million to 2 million, TEUs. This may perhaps be achieved earlier than expected as forecast by JICA (1980, 1989, and 1991) have materialised sooner than anticipated. (Dassanayake op. cit..198). Sri Lanka's feeder region mainly consists of ports in the Red Sea, the Persian Gulf, Pakistan, Bangladesh and India. In Bangladesh, Chittagong is the only port which handles container cargo. In India, there are container ports at Bombay, Cochin, Kandala and Tuticorin in the west, and Calcutta, Haldia, Madras and Visakhpatnam in the east. In Pakistan, Karachchi is the main container port. In the Gulf and Red Sea region there are the container ports Mina Sulman, Aquaba, Shuwaikh, Shuaiba, Fujairar, Khor Fakkan, Mina Quaboos, Dammam, Jedah and Rashid which are served by Colombo.

In the event of the current economic and industrial growth continues with the further integration of these economies with the world economy, it is inevitable that Sri Lanka will be called upon to play a dominant role in South Asian transhipment market provided, however, some of the weaknesses at the Port as will be referred to later are eliminated. The majority of Colombo's transhipment containers originate in South Asian Ports and the Persian Gulf ports mentioned elsewhere in this account, the Far East (Singapore, Japan, South Korea, Taiwan and Hong Kong), and in the U.S.A. and in European countries such as Netherlands, Belgium and Germany. These containers are destined for South Asia, Europe, the U.S.A., Far East, the Persian Gulf and Africa.

It must be re-emphasised that it is Sri Lanka's strategic position that gives the Port of Colombo the lead over other regional ports to attract more transhipment, not only from South Asia, but also from the Far East, East Africa and Australia including the Pacific Rim countries. Despite that on the Far East-Europe sea route there is the possibility of Colombo

encountering competition perhaps in a formidable scale from Singapore, Fujairah and Mina Quaboos, Nhava Shiva and Madras (Chenai). Fortunately, however, the competition for transhipment at present is mostly from Singapore and Gulf ports and not from those of India. The reason being that Indian ports are not strategically situated as Colombo is and shallow depths are the major constraints to the accommodation of latest mega-carriers. Moreover, there is a trend in the mega-carriers to call at a limited number of ports and would obviously prefer Colombo to Indian ports which are a few hundred miles away from the main sea routes. Assuming that Colombo would soon take corrective measures to rid the Port of the weaknesses, this factor, too could be made use of to the Port's advantage to attract more transhipments. At the same time the economic restructuring programme that India has embarked upon may attract large scale foreign investments which will also be to Sri Lanka's advantage by way of creating more opportunities to develop the feeder network between Colombo and Indian ports further.

In the case of Bangladesh and some Indian east coast ports cargo is transhipped via Singapore. Most of the cargo from Pakistan and some of the cargo from the west coast India is also transhipped via the Persian Gulf ports. If Colombo were to create an ideal commercial environment for the feeder network by formulating a good marketing strategy to attract main lines, there is the possibility to lure transhipment from these regional ports as well, particularly the Gulf ports. In the case of Singapore it will be a far cry for Colombo to compete with largely because as mentioned earlier it is one of the best transhipment ports in the world on account of its quality of services, lower operational costs, superior infra and super structures, competitive tariff structure, short turn round times, and the supreme strategic hub location in the economically fastest growing region of the world. But there is some hope that Colombo could capture at least a small proportion of Singapore's transhipment market, since that port has almost

reached its saturation point. As far as the immediate future is concerned it is thus a matter for consolation for the SLPA that the hard earned reputation of the Port of Colombo as a transhipment hub in South Asia, is not endangered, a conclusion which can also be supported by the Port's past performance. In the period 1980/84 the annual average transhipment TEUs handled by the Port, for instance, which was 41,199 rose to 280,805 in the next quinquennial and rose to the amazingly high figure of 617,600 in the quinquennial that followed. The progress of the trade was much more remarkable thereafter so much so that by 1995 the total transhipment TEUs handled reached the record figure of 700,492 (See Table 7.4). As in the past there is also the possibility of the Port of Colombo attracting transhipment from hitherto unexpected quarters. The JICA's prediction of 334,000, 574,000 and 600,000 transhipment TEUs for Colombo for the years 1990, 1996 and 2001 respectively (exclusively of from / to mother vessel's ports and inclusive of from/to Bangladesh, feeder ports in East India, West India, Pakistan, Gulf and Red Sea), which became a reality sooner than expected justifies such a conclusion. For instance, in 1995, Colombo's transhipment TEUs were much more than the (See Table 7.4) projected estimate for the year 2001 (Dassanayake, op cit, 198-199). 10 Another important issue to be given serious consideration in this regard is the pattern of growth of transhipment in the countries of the region.

Table 7.4
Transhipment TEUs Port of Colombo 1980-1995
(Quinquennial Averages)

Period	Total	Average	Percentage Growth
1980-84	205,993	41,199	
1985-89	1,404,028	208,800	85
1990-94	3,087,998	617,600	55
1995	700,492	whilete land from	Activity and the last

(Source: SLPA)

In terms of growth rates it appears that Bangladesh surpasses Sri Lanka (See Table 7.5) but it does not mean that it would affect Colombo to any considerable degree in the South Asian transhipment market. Bangladesh though, registers higher growth rates in the periods 1984/89 to 1990/94 in absolute terms transhipment containers handled is not of much significance. In any case when the average annual transhipment containers handled by Bangladesh in the period 1990 to 1994 and the projected annual average for the period 1995-1999 are taken into account it is very unlikely that it would be a potential threat to Colombo. India, Pakistan and the Gulf and Red Sea countries which have the capacity to compete with Sri Lanka in the transhipment market, the emerging situation, however, seems to be different. In terms of TEUs handled India and Gulf and Red Sea countries appear as strong competitors to Sri Lanka in the regional transhipment market, but when their rate of growth of transhipment trade is concerned Sri Lanka will continue to have an edge over these countries and very likely to maintain that position in the future as well. Despite these favourable factors, it is in Sri Lanka's interest that it should not be too complacent about Colombo's lead over other ports in the regional transhipment market.

As in the distant past Colombo's survival as a centre for shipping in the region depends heavily on that branch of trade and to some extent on fuel bunkering, supply of water and shipping stores. In the circumstances what Sri Lanka should do is to put its utmost effort to capture a greater part of the expanding transhipment market in South Asia which will ensure Colombo's hard earned position as a transhipment hub port. There is very little hope that the Port of Colombo can place much reliance on the expansion of Sri Lanka's overseas trade for its survival mainly because of the unpredictability of the future of the export sector.

The plantation sector has already reached a physical limit to its further expansion and what is more, has ceased to be the

Distribution of the Transhipment Market in the South Asian Region 1985-2000 (TEUs) Quinquennial Averages) Table 7.5

	HILLY Y	0	5	1
8		5 50	1 35	basi
Grand Total %	17374451 3474890	5200205	7030564	iografia Na series
	17374451	52 26001023 5200205 50	16 35152822 7030564	80945508
5		52	91	•
Pakistan	291918	444305	516714	
	1459593	59 2221529	37 2583572	522622
150	1-547	59	37	
India		824375	1135300	
Gulf & Red Sea %	2590093	139 15203080 3040616 40 4121876 824375	25 5676500 1135300	1321855
%		9	22	
Gulf & Red Sea	2170938	3040616	3797240	
Sall	10854690 2170938	15203080	18986204 3797240	4251217
15%		139	143	
Bangladesh	57163	136575	331852	el sid rbeni
	285813	73 682878 136575	65 1659258 331852	112977
29		73	65	11.11
Sri Lanka	436852	754332	1249457	
	2184262	3771660	6247288 1249457	1538943
ized by No	olahaa F aavanah	OUndativ	00-599	2000

(Source: Dasanayake Seaports and their Generated Business Activities in Transition, p197.)

principal contributor to the country's export earnings. The industrial sector led by the garments industry that has emerged as the main subscriber to the total export earnings also has introduced more uncertainty to the economy and the Port of Colombo cannot place much reliance on the export sector for its commercial viability.

The freight forwarders of Sri Lanka are of the view that the garment industry is a footloose industry moving from country to country in keeping with cost of production. According to them a large number of garment factories in Europe and United States have been closed whilst the remaining are finding it extremely difficult to survive and have adopted various strategies to remain in business. Some have succeeded in partial relocation in the developing countries whilst some have relocated the garment industry that was once thriving in Japan China, Hongkong, Korea and Taiwan and in recent years has moved to Pakistan, India, Bangladesh and Sri Lanka. The next growth area is the region consisting of Vietnam, Colombia, Laos and possibly an east Africa nation.

The manufacture of standardized garments is a mobile labour intensive and systematic form of production which is not dependent on heavy capital investments or long gestation periods to train and establish a manufacturing facility. Fabrics or textiles is the single largest input ranging from 50-60% of the finished product. This input can readily be sourced worldwide by all manufacturers at roughly similar prices. The cost of production and easy movement of cargo has been the determining factor in locating a garment industry. It is also pointed out that the garment industry as distinct from the textiles is high labour intensive. Whereas in the latter case there has been heavy application of new technology with the result that the number of workers in a textile mill has been reduced considerably. Emphasising the fact that easy movement of cargo and cost of production have been the determining factors

in locating a garment industry it is also stated that of Sri Lanka's total export of garments, almost 60% has been to the USA and about 35% to the European Union. What is most significant is that the USA has imposed quotas on about 50 items of clothing from Sri Lanka and Hongkong and some other countries have put over 90 items under the quota system. Moreover, almost 90% of Sri Lanka's exports to the USA consist of quota categories of garments. In the case of the European Union, the situation is somewhat different, as 17% of the country's exports represent quota categories whilst the rest are non-quota. The analysis makes it quite obvious that Sri Lanka's success in garments exports has been to a great extent depends on the quota system. Other than changes taking place in international trading patterns there are also signs of shifting comparative advantages massive investments in new technologies, globalisation of production and a vast expansion of a range of tradeable goods and services which could well be a challenge to Sri Lanka.

Much more serious will be the effects of the establishment of the World Trade Organisation in 1995 which has resulted in the phasing out of textile quotas for the next eight years. This means that by the year 2005 there would be total free trade in garments. Sri Lanka will then have new supply sources coming into the market, and besides, the industry will as stated earlier may shift to low cost producers. The threat facing Sri Lanka, therefore, is not only from the existing competitors but also from new sources. The damage to Sri Lanka's profitable garment exports will also be intensified by the straightening of regional trading groups with special facilities or concessions. For example the establishment of NAFTA (the North American Free Trade Association with the USA, Canada and Mexico) with the possibility of membership being extended to other Latin American countries. This agreement providing duty free and quota free access has already resulted in a sharp increase in Mexico's garment trade with the USA. In the European Union

Sri Lanka is at a disadvantage because of some of the country's competitors like Bangladesh are classified as least developed and have duty free access in comparison to a 14.5% duty on Sri Lankan garments. Again the countries in the European Union have a greater interest in developing the East European countries who had a well developed textile and garment industry.

This being the background within which Sri Lanka's garment industry has to operate what is of crucial importance according to the freight forwarders is how fast could a container be moved from the factory to the export destination. Also to be taken into consideration is the fact that the buyer often decides on the method of transport usually by sea and in the event of a delay the manufacturer will air freight the goods at his cost and even buyers decide on the carrier or freight forwarder. How these developments in the garment industry can affect the tonnage of Colombo's shipping and cargo also has to be given serious attention. As at present Sri Lanka exports about 450 million pieces of garments annually with a value of around US\$ 1.6 million and 50-60% of the value consist of some 500 square metres of fabrics imported to Sri Lanka from countries such as China, Hongkong, Korea, Taiwan and Indonesia. Moreover, apart from frequency of sailing to Europe and the USA there is also business in moving imported inputs required for the apparel export industry from countries in the Far East. (The Island, December 29,1997).11

These developments in the spheres of international trade and shipping are very likely to affect the gains that the Port of Colombo made in the region in little more than a decade of its becoming as a container port. Since such development are quite beyond Sri Lanka's control what should be done from a long term perspective is to identify the weaknesses at the source and take appropriate action towards their solution. That alone as was indicated earlier will help Sri Lanka to capture a

major share of the expanding transhipment business in the region which will to some extent compensate the loss from possible fluctuations in cargo throughput. Such a policy would also entice more shipping to use Colombo for purposes other than the transport of cargo only.

Port administration

Admittedly, it was the improved port administration with the creation of the SLPA that initially helped enhance port efficiency which promoted the Port of Colombo to a regional hub port. This happened in a relatively short period after the formation of the Ports Authority, and also when the volume of dry cargo and the container traffic handled was of a manageable level and thereby spared the Port being inflicted with serious problems of congestion. As the pressure on the Port increased with an unexpected growth in merchandise trade following trade liberalisation and also when the impact of the rapid increase in the container throughput were being felt certain weaknesses in the Port's administrative structure began to surface.

An examination of the causes for them, however, shows that the Ports Authority alone is not to be blamed for all the weaknesses that seemed to have affected the Port of Colombo. There appeared complex bureaucratic procedures, system oriented administration and management in ports, shipping and customs which in combination have affected the flexibility and competitiveness of Port's business activities. While the majority of managerial and operational staff have not been trained to deal with the latest developments in maritime technology and management, the staff has been trained to serve the system oriented inward-looking environment rather than to pursue a customer driven approach. But recent events cast doubts as to whether or not the SLPA is free to follow a customer-driven outward approach (Dasanayake 141). One of the strengths of

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the Port, as stated earlier had been its competitive tariff structure, a factor that helped attract shipping, but, at the moment as the media reports indicate it is being undermined by ministerial directives. In February 1997 the Minister of Ports and Shipping, for instance, was said to have directed the SLPA an upward revision of port tariff from April of the current year without even giving advance notice to those business interests connected with the Port. The proposed revision being (a) navigation average tariff increase 19-25% and (b) stevedoring domestic containers 10% (Island, February 17,1997).¹³

Assuming that the SLPA is free of outside interference in the manipulation of Port tariff rates to keep them on a competitive level that nevertheless demands professionalism. In essence it means the presence of a body of persons with a sound knowledge of world shipping trends, changes taking place in the managerial techniques of ports outside Sri Lanka and economic restructuring in developing countries and its attendant impact on ports. With such knowledge the port administration could embark on short, medium and long term planning, in the provision of infrastructure facilities as well as of improving the quality of services. The SLPA, on the other hand cannot enlist services of men of professional ability until the practice of political appointments are done away with. However, this is a recent phenomenon. From the days of the CPC (Colombo Port Commission) as well as in the period 1979 to the early nineties the Port at least had been headed by a senior and an experienced person from the public service who enjoyed the continuity of service. Through practical experience such a person, therefore, was able to gain some professional knowledge on port development and administration. This may be one among several reasons as to why the SLPA was able to manage the affairs of the ports in Sri Lanka with the least amount of problems as well to plan their development from the inception of the SLPA to the early nineties. But thereafter that

was not strictly adhered to and there was criticism of political considerations in the appointments to this responsible post and at times it was not in the best interests of the ports in the country. A port is a gateway for international trade, the management of which requires specialised skills and, hence, should not be treated as any other public enterprise in Sri Lanka where in most cases political considerations supersede competence in appointments to positions of responsibility carrying very high remuneration. This practice should necessarily be changed and persons of professional competence with the ability to foresee changes to come should take charge of port management and administration. Such a policy to a great extent will pave the way for Sri Lanka to meet the challenges coming from her competitors and also the changes in the global maritime scene.

As a matter of urgency the SLPA should, hence, be more independent from the control of the government. Routine administration should be delegated to the executive management level from the Board of Directors. In order to have a good co-ordination and to make quick decisions, organisational reform is necessary. As suggested by the OCDI/JPC that six Departments should be established through the amalgamation of existing Divisions. The executive management level were to consist of the Managing Director and six directors of the Departments. The powers and responsibilities of these upper management level should be more clear and more free from what is said to be annoying interference. Terminal operation and management of JCT, OCT and conventional berths should be carried out by independent divisions in the Traffic Department with overall responsibility and autonomy (OCDI/JPC 1995, 5-12).14

An equally important issue to be resolved according to expert opinion, is the demarcation of the optimum point between the purely government administration/ management and the purely commercial administration/ management. The need for the resolution of this problem arises from two important reasons. Ports in general are considered to be a kind of public infrastructure facility in every country and its administration/management is mostly public either purely government or at least by a third sector. Even in the case of the Port of Felixtowe in U.K. which is a good example of a privatised port in the world, the maintenance of the navigation channel is being done by the public sector.

On the otherhand, current global shipping is at the height of very severe competition, and ports are also fighting with each other to attract more vessels and cargoes. In this context, an international hub port which collects tranship containers is the most serious version of international inter-port competition. Shipping lines select a hub port purely on the basis of its overall profitability, largely because of the fact that any international hub port is neither the origin nor the destination of tranship containers. An international hub port must, therefore, be managed and operated purely or at least highly commercially to provide port services with good quality and at reasonable prices. Otherwise a port cannot survive the severe international inter-port competition.

There are two extreme cases in port administration/management system, one is purely governmental administration/management or a port directly controlled by a government, the other is purely commercial administration/management or a pure private port. Somewhere between the two lies the most desirable system of port administration/management.

The management of ports and harbours directly by the government ceased in Sri Lanka with the birth of the SLPA in 1979. However, in the light of the provisions of the SLPA Act and findings of studies on the performance of the Authority

show that the current extent of commercialisation and decentralisation proved to be insufficient for an international hub port to survive in an environment of severe inter-port competition. Therefore, as in the case of further expansion of port facilities, the team of experts in their report strongly recommended the reform of the SLPA to be given high priority and for the purpose were set out the following guidelines for consideration.

- (a) Obtaining greater flexibility in the administration and management of the SLPA. This is to be through deregulation of various port activities such as tariff setting and purchase and procurement procedure by the government. This is considered to be one of the key issues for SLPA's management in order to cope with international commercial competition.
- (b) Separation of the decision making function from the executive function of the SLPA. The purpose being to secure timely and efficient decision making system for one thing and to secure prompt and efficient system for another.
- (c) Further delegation of executive powers which is aimed at securing quick and efficient execution of decisions be further delegating the powers at the top management level to the next tier of officers.
- (d) Advising/supervising/monitoring system. This is partly to compensate for the reduction of the powers of the Government over the Ports Authority and partly to solicit opinions outside SLPA, mainly the private sectors relevant to the port and shipping (Ibid. 4a 1-5-4a 1-6)¹⁵

Inland Transport Problem

Sri Lanka had a reasonably good road system compared with many developing countries.but with the coming into being of the open economy system as well as the implementation of several lead projects the development of road haulage has been such that there appeared serious deficiencies in the inland transport system. Some parts of the country, for instance, are still to be integrated into the economy through a network of good roads. This is despite the spread of Free Trade Zones.(FTZs) outside Colombo's immediate hinterland and the prospects of these being set up in the remoter parts of Sri Lanka. On the otherhand, the poor maintenance of existing roads and the heavy traffic on roads in the capital city of Colombo and its immediate vicinity and the consequent congestion adds to declining productivity experienced by the Port in recent times.

The railway network created during British rule to facilitate overwhelmingly the plantation agriculture remains virtually the same without expansion. Neither is the existing railway network improved to meet the requirements of multi-modalism which will come to stay in the near future largely because of its cost effectiveness. Stated briefly, multi-modalism means door to door service eliminating double handling and direct delivery to the port for shipment where exports are concerned and viceversa for imports. An UNCTAD study on the physical distribution of costs in 1988 shows that such costs represent between 9 and 10 percent of the sales value of goods. The same study shows that physical distribution costs are almost evenly split between transport costs, packing costs and warehousing costs. The study concluded that because of the ingenuity of multi-model operators transport costs are being drastically reduced. Multi-modalism, therefore, involves development of transport links to move boxes to and from the port. Realising that multi-modalism would be a general feature some developing countries, India, Kenya and Malaysia have already taken steps to establish dry ports (ICD's) in far flung areas as well as of providing container services to their major ports. According to UNCTAD information available up to 1989 the weekly frequencies of container train services in India are: Bombay (Mumbai) / New Delhi 3; New Delhi / Bombay (Mumbai) 3; Madras (Chenai) / Bangalore 1; Bangalore /

Madras (Chenai) 1; and Madras (Chenai) / New Delhi 1. In the case of Malaysia in the same year the weekly container train services frequencies totalled upto 44 while that of Kenya 14. Strangely for Sri Lanka in the container train services, the weekly frequency was only one ie Nuwara Eliya/ Kandy/ Colombo (UNCTAD 1989,54-56.)¹6 There is no evidence that the position is improving. The only significant movement is that of containerised tea, for example, the daily harbour train from Maradana railway yard to Port via the Kolonnawa/Port railway yard covering a few km. Undoubtedly, this is an inhibiting factor for the faster containerisation of Sri Lanka's trade. Colombo will thus be severely handicapped if Sri Lanka does not prepare itself to meet the requirements of intermodalism.

In the case of the containerisation of dry cargo, however, Colombo has made rapid progress, particularly in the case of exports which had increased from 76% in 1986 to 96% in1996. The containerisation of dry cargo imports although has not been as remarkable as exports it nevertheless indicated a slow but a steady increase. (See Table7.6) The percentage of containerised dry cargo imports which was 48% in1986 has risen to 73 in 1995.

Table 7.6

Dry Cargo by type of handling 1896-95 (in 000 tonnes)

Year	Total Cargo handled	Total Imports	Tonnage Contain- erisation	%	Total Exports	Tonnage Containeri- sation	%
1986	5978	3716	1793	48	2369	1793	76
1987	7053	4256	2271	53	2865	2339	82
1988	8903	5289	3263	62	3614	3251	90
1989	8188	4834	3004	62	3354	3021	90
1990	9030	5322	3415	64	3708	3299	88
1991	9244	5421	3560	66	3824	3415	89
1992	9185	5526	3732	68	3659	3414	93
1993	11471	6859	4810	7-	4612	4398	95
1994	12244	7118	5558	78	5326	5054	95
1995	13882	8172	5989	73	5713	5463	96

(Source: SLPA, Port Statistics Series VI,XIII and XVI)

Nevertheless, when the containerisation factor of Colombo's total volume of cargo handled is considered the progress of containerisation appears to be less impressive which is examplified by the figures in Table 7.7. In 1993 the total tonnage of cargo containerised (including break-bulk transhipment etc) has increased by 63% from 30% in 1984, amounting to a twofold increase in percentage terms whereas in aggregate terms there had been a considerable increase as it had risen to 14,712,000 MT in 1993 from 6,638,000 MT in 1984. The volume of exports which had risen to 1,031,000 MT in 1993 from 470,000 MT in 1984 indicate a lower growth rate relative to that of imports. But the progress of containerization of exports is much more impressive than that of imports as it had increased to 84% in 1993 from 45% in 1984. While the volume of imports during these years had increased from 370,000 MT to 1,400,000 MT which is equivalent to a fourfold increase the percentage of imports coming in containers has recorded little more than a twofold increase. It means that in the containarisation of imports much headway, has to be made. Data regarding export of commodities in terms of volume are available only for tea, rubber and coconut products which by 1993 constituted 34% of the total volume (See Table 7.8) of exports. The rest can be assumed to be of other minor agricultural products and industrial products including manufacturing, textiles and garments etc. The overall containerisation factor of break -bulk cargoes for the year 1993, according to Table 7.8 is 83%. Based on these percentage increases Dasanayake's projected percentage increases for 1996 and 2000 are 90 and 92 respectively for exports and 42 and 43 respectively for imports. The more remarkable growth in the ratio of containerisation of exports is largely due to the fact that a significant volume of primary products for exports is being packed in containers in stores at Colombo as are the garment exports. (Dasanayake.opcit 195)17

Table 7.7

Composition of Cargo Throughput by Type of Cargo Port of Colombo, 1984-1993, (000 Mt.Tons)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Imports	370	438	526	578	651	761	933	973	1176	1400
Container	18%	19%	22%	25%	25%	30%	33%	35%	40%	41%
Export	470	506	648	659	652	761	821	844	887	1031
Container	45%	49%	54%	63%	66%	71%	69%	69%	79%	84%
Total	6638	7338	8518	9682	11469	10429	11718	12282	11957	14714
(including										
General Cargo	0,									
break-bulk, dr	гу									
bull-liquid tra	nship-									
ment restowin	ng)									
Container	2024	2507	3522	4850	6577	6071	6777	7031	7154	9221
(including										
break-bulk										
tranship-										
ment)	30%	34%	41%	50%	57%	58%	58%	57%	60%	63%
(Sources: SLP	(Sources: SLPA, JPC, Table 2-4-8)									

In fairness to the SLPA, it must be stated that it cannot be found fault with the slow pace at which the containerisation of Sri Lanka's cargoes takes place resulting from bottlenecks and the deficiencies in inland transport infrastructure the responsibility of which lies with the Central Government and to reinforce that argument it can be said that the Port of Colombo embraces almost whole of the island as its hinterland. It is a fact that the SLPA is financially buoyant at present but it is not buoyant enough to invest large sums on infrastructure improvements. It is therefore the responsibility of the Government to take appropriate action towards meeting the needs of containerisation of the country's imports and exports. Urgent attention is needed in that direction as it will be one of the ways of ensuring the competitiveness of Sri Lanka's exports and of reducing, at least to some extent, the cost of imports in the container age.

Table 7.8

Commodity Composition of Export Containers Port of Colombo 1986-1993 (Unit,000 tons)

	1986	1987	1988	1989	1990	1991	1992	1993
Major	83.8	163.6	137.9	140.0	153.7	180.0	242.9	350.3
Agricultural produ	ict							
Tea	6.6	44.6	64.8	67.9	71.0	42.1	76.2	178.6
Containerisation	3.2	22.2	29.5	33.3	32.9	19.8	41.9	81.8
Facto						*,		
Rubber	55.5	59.9	45.5	45.4	43.3	55.9	65.783	64.1
Containerisation	50.5	49.9	46.1	52.8	49.9	73.2	-	92.1
Facto								
Coconut	21.7	67.1	27.3	26.7	39.4	82.0	101.0	107.6
Containerisation	14.3	46.5	34.2	23.1	34.6	6.2	93.5	99.6
Facto								
Others	563.8	495.0	614.4	620.6	667.7	664.2	643.9	680.5
Containerisation	77.1	82.4	87.5	93.1	85.9	80.3	84.8	81.3
Facto								
Total Volume	647.6	658.6	652.3	760.6	821.4	844.2	886.8	1030.8
Containerisation Facto	53.9	62.6	66.1	70.9	68.8	69.0	78.6	83.6

(Source: OCDI, JPC, Table 3,1-5)

Port Infrastructure

It is no exaggeration that the rapid strides made in container throughput by the Port of Colombo was by and large due to the equally rapid progress made in the development of container facilities. While Colombo made such progress in the provision of those facilities the regional ports lagged behind which as stated earlier became an added advantage to attract container vessels to Colombo. But this seemed not to be a permanent feature as the weaknesses of regional ports, such as those in India are disappearing and are progressing fast in the development of container facilities. There is no doubt that in

the not too distant future these ports would improve their quality of services to attract more shipping. As media reports suggest there are signs of reputed shipping lines making arrangements to establish feeder services with some Indian ports. The APL for instance, is to launch a feeder service between Singapore and the major east coast Indian ports (The Island March 3rd 1997). 18 It can however, be argued that since Colombo's transhipment trade with the east coast Indian ports as referred to earlier is marginal compared with that of Singapore, it is rather unlikely that such developments would have much impact on Colombo's present position as a transhipment point. But as a long term measure, Colombo must nevertheless give serious consideration to this new development in view of its heavy dependence on a high risk business like transhipment and it is in its best interests that efforts should be made to capture new markets and not confine its trade with certain ports only. In the event of the commencement of such feeder lines with the west coast Indian ports what would the future holds for Colombo's transhipment trade has to be given serious consideration. Although this may perhaps be a remote possibility, Colombo, need be aware of such developments in view of its main role as a transhipment point in the region, more particularly with the west coast Indian ports.

A high level of port efficiency is a sine qua non for transhipment which as stated above is a high risk business. The Port of Colombo, therefore, cannot forego its competitiveness as a transhipment port by allowing congestion to continue, largely because in recent times it has become a major a source of complaint by shipping lines. The complaints by shipping lines and various agencies with business links with the Port, it must to be said are not without foundation as amply demonstrated in Tables 7.9 and 7.10 illustrating the berth occupancy rates and service level respectively of the Port. It is transparently clear that berth occupancy rate is extraordinarily

high. The container berths, JCT and QCT record their occupancy rates of more than 60% whereas some of the other berths recorded still higher occupancy rates, especially at QEQ,BQ,SP and PVQ which are for break-bulk cargoes handled with the use of conventional methods (OCDI/JPC op cit 2-4-22).19 Compared with less than 50% berth occupancy rates in the ports of developed countries the occupancy rates in both types of berths at Colombo appear relatively very high. The service level on the otherhand too seems to have deteriorated since the late eighties and by 1993 it had reached more than 70%. The deterioration in port efficiency leading to severe congestion has to be arrested early since the Port of Colombo is used very largely by reputed international lines or as a base port from where they use feeder services to ports outside the main sea-routes serving the Indian Ocean trade. The principal objectives of this strategy by main lines are to save time and to eliminate as far as possible diversion costs. The extent to which the Port is used for the purpose could be gathered from the details of mother vessels and feeder vessels using the Port from 1989 to 1994 as illustrated in Table 7.11. The mother vessels dominated ship calls at Colombo and had increased by 49.3% in 1991 as compared with that in 1989 while the number of feeder vessels had increased by 38.6%. Quite apart from the increasing number of calls by mother vessels at Colombo there is also the possibility of its use by deep sea container vessels in future. Several leading shipping lines are to deploy post-Panamax type container ships with larger carrying capacity on Far East/Europe route and are very highly be operated via Colombo.

Although the JCT and the cranes installed have the dimensions sufficient to clear the post-Panamax vessels, namely 14.5m in depth and 44.5 m in reach from the seaside rail (Ibid)²⁰ that alone will not help Colombo to attract vessels of ever increasing capacity. It had in fact been the case since the introduction of fourth generation container vessels making

round the world rationalised voyages without calling on every port enroute so as to save as much time as possible. The large number of mother vessels that presently use Colombo as well as those of the post-Panamax, it has to be stated, expect a very high service level at Colombo. In the present context it is however, an unfortunate feature that the Port which began to enjoy the reputation of being efficient after decades of acute congestion has once again begun to show signs of decline (see Tables 7.9 and 7.10) since the late 1980s. The underlying causes for such development therefore need to be identified so as to discuss what counter measures should be taken before the problem becomes worse. If not adverse repercussions of declining port productivity would not only be felt on the Port itself but much more serious would be its effect on the country which had oriented itself to a market economy.

Table 7.9
Berth Occupancy Rates %
Port of Colombo 1988-1994

Year	Contain	er Bert	hs		Other	Berths		
	JCT	QCT	QEQ	BQ	СВ	GP	SP	PVQ
1988	79	-	72	87	68	41	92	84
1989	83	66	77	85	56	34	93	76
1990	78	56	78	84	53	36	83	76
1991	71	60	83	89	61	27	88	80
1992	74	62	82	86	76	72	92	92
1993	79	76	88	84	62	40	92	87
1994	81	86	84	89	71	50	87	84

(Source: Report of the Study for Enhancement of Port Management OCDI, JPC February 1995, p.2-4-22)

In the search for the causes for the prevailing problem of congestion at Colombo the most obvious reason appears to be the labour related problem. Colombo, a port that enjoyed almost complete industrial peace in the greater part of the eighties compared with the chronic labour unrest of the past as

well as with the strike prone ports of India shows signs of change in that position. While the work stoppages in the Port in the late eighties which were sudden and were largely a result of intimidation on the part of the local youth insurrection, those that occurred thereafter were motivated by direct trade union activity. Whatever the reasons behind the work stoppages were, the late eighties saw the early beginnings of berthing delays and declining productivity leading to congestion at Colombo becoming a familiar feature. So much so that permanent queue of ships outside the harbour for want of berths has become a common sight at Colombo. To give an example of the gravity of this new development, in early June 1994 a strike caused as

many as 30 ships to line outside and 21 ships inside the harbour lying idle for three days for want of berths (The Sunday Times, June 12, 1997).21 There is no guarantee that things will change for the better in course of time largely because the country's most powerful trade unions, operate in the ports. Besides, rising inflation leads the real wages of Sri Lankan port workers in common with others rapidly to decline which in turn can lead to industrial unrest. Hence repression of trade union action may not be an effective answer to labour unrest when Sri Lanka is going through a period of very high inflation. Being a highly politicised workforce the dock workers also resort to strike action over non-economic issues. Presently, the Port is faced with threats of token strikes against the QEO privatisation issue about which reference will be made later and already the authorities as media reports indicate are making contingency plans as a matter of high priority to ensure the smooth functioning of the ports (The Island, January 20, 1977).22

Other than strikes there is also evidence of large scale absenteeism among port workers. At a recent conference presided over by the Minister of Ports and Shipping in December, 1997 the Chief Operations Manager, for example presented figures of poor attendance of workers which contributed to the drop in productivity and slow discharging of cargo. However, the contention of the President, United Port Workers Union is that while accepting absenteeism, as a fact the port workers are not to be blamed for it. It was alleged that the absenteeism of port workers has been very largely due to deterioration in the transport services throughout the country. Workers travel to Port of Colombo, from places as far away as 40 to 50 km like Galle, Ambalangoda, Kalutara, Kegalle, Kurunegala etc. Acute traffic congestion, makes even the few buses available arrive late and result in many workers turn back as late comers. Moreover, trains rarely arrive in time at the Fort Railway Station. Therefore, the president of the union argued that the port employees were not to be blamed without studying their socio-economic backgrounds.

Table 7.10 Service Level - Port of Colombo 1989-1993

Year	Container Average Waiting Time (hr.)	Berths Average Service Time (hr.)	Average Tum-round (hr.)	Average Service Level (hr) (%)	Other Average Waiting Time (hr)	Berths Average Service Time (hr)	Average round (hr)	Average Service Level (%)
1989	9.56	23.22	32.78	41.2	28.01	137.63	165.63	20.4
1990	4.45	19.04	23.60	23.4	20.51	119.42	139.94	17.2
1991	5.96	20.02	25.98	29.8	20.53	120.16	140.70	17.1
1992	7.01	18.36	25.36	38.2	24.37	117.54	141.90	20.7
1993	17.61	22.51	41.84	78.2	36.38	104.18	144.20	24.9

(Source: SLPA; Report of the Study for Enhancement of Port Management OCDI, JPC February 1995, p.2-4-22)

Finally, there is the operation of the two shift system as opposed to the three shift system that prevails in most of Colombo's competitor ports which leads to congestion and prevalence of a high berth occupancy rate. At the Port of Colombo the first shift is from 7.30 a.m. to 16.30 p.m. (with a break for meals from 12.00 noon to 13.00 p.m.) and the second shift is from 16.30 p.m. to midnight (with a break from 21.00 p.m. to 22.00 p.m.) The night shift is extended to 4.00 a.m. when necessary. The rotation of day and night shifts takes place weekly.

A legacy of labour related problems such as strikes, absenteeism, the persistence of two shift system instead of a three shift system etc. are thus identified as causes for low productivity. Interestingly, a situation of this sort has surfaced when about 80% of Colombo's dry cargo is containerised and handled mechanically whereas in the pre-1980 period bulk of the cargo consisted of break-bulk handled under conventional methods. In this connection a question to be raised is can the Port of Colombo with a staff strength, for example, of 17,000 in 1995 be constrained. by a deficiency of labour?. The answer is that it could not have been because the Port employs such a large staff which is far in excess to handle,in1995 for instance 1,049,004 containers (See Table 7.11). In contrast, Singapore in the same year with a staff strength of 4000 handled as much as 12 million TEUs and, therefore, cannot it be said that Colombo is over staffed (over 20,000 in 1977) in relation to the total number of TEU's the Port handles. (The Island, March 3rd 1997) 23

Table 7.11
Number of Container Vessel Calls by Wharf, Port of Colombo, 1989-1994

Wharf	1989	1990	1991	1992	1993	1994
JCT 1& QEQ	638 468	629 573	590 613	695 698	816 828	844 555
Other Wharf		-	•	-9-78-13	maradori - 3	63
Total	1,106	1,202	1.203	1,393	1,644	1,462
JCT 1&	331	530	528	513	439	183
QEQ	86	62	100	116	1139	232
Other Wharf	miq OU al	on mi		St. St. R. 18. 18.	ngLasti e	127
Total	417	592	628	629	578	542

(Source: OCDI, JPC, Table 2.4-5)

The result is that the cost of employing excess labour is being borne by the Port which invariably is passed down to the port user, the shipping community, the importer and the exporter. It is also surprising that congestion prevails at Colombo despite the Port being under utilised in terms of capacity that is estimated to be around 1.6 million TEUs. Under normal demand and supply conditions this means that the Port's container handling capacity is less by 300,000 TEUs which makes it possible to allow ships to enter and discharge their cargo without the present practice of having to wait as long as 20 hours (Ibid).²⁴

Curiously, the level of productivity achieved by the Port to some extent is said to be a result of an extra payment offered by the agents for moving each container,. The efforts to eradicate this practice, according to authoritative sources, have brought very little success. Consequently, it has now come to stay rather as a "productivity incentive" and cannot therefore, be construed as a "bribe". A much more meaningful solution, the agents, believe could be found in a proper incentive scheme for performance and attendance with stepped up supervision. Because, what is in practice at present could only be a palliative rather than a long term solution to Colombo's apparently worsening problem of congestion. The argument being that, incentive payments directly linked to output are, in general, a very effective way of rewarding port workers. Unofficial incentive payments from port users to the workers, on the other hand, might spoil the morale of workers and reputation of the SLPA. Since it is far greater than the current official incentive payment, it may jeopardise management control. Although it is a difficult task, maximum effort should be made to replace such a system with an appropriate official incentive scheme in a more open manner(Ibid) OCDI/JPC 4a-2-11-4a-2-12)25

As argued at the outset there is no likelihood of a formidable threat to Colombo's position from the competitor

ports in the region in the immediate future. But in the event of problems of congestion and the level of productivity declining further there can certainly be a repetition of the situation that was in the fifties and the sixties. In the present context if that happens the long term effects will be much more serious than in the past largely because its repercussions will not be confined to the payment of heavy demurrage, shortfalls in ship arrivals etc. Besides the adverse effects on transhipment which had grown in leaps and bounds, the economy at large may also stand to suffer. Unlike decades ago when the mainstay of the economy was plantation agriculture led by tea with the U.K's dominance as the buyer of Sri Lankan exports, a reversal has taken place by which as referred to earlier industrial exports have outstripped plantation agriculture in the total value of exports. The sources of Sri Lanka's exports as was discussed in Chapter IV too have undergone a marked change. Sri Lanka no longer remains an inward looking economy but has from the late '70s been integrated with the global economy through a market economy policy. Inspired by the success stories of Singapore, Malaysia, Taiwan and other East Asian countries, Sri Lanka also aspires to reach NIC status shortly. The experiences of these countries emphasise that a high level of port efficiency is a pre-requisite in achieving that objective. Sri Lanka should in all seriousness therefore address itself to find effective solutions to problems affecting port efficiency, port congestion in particular.

The crux of the problem as is evident from the earlier discussion is the employment of a staff unrelated to the volume of general cargo and the containers handled which becomes obvious if a comparison is made with Singapore as was done earlier It is unfortunate that the Port is being used as a job bank like any other public enterprise in Sri Lanka. The most sensible step to be taken in a situation of this sort is to follow countries like Singapore and Malaysia and move towards further computerisation of office works and the mechanisation of

cargo handling operations. Compared with some ports in the region the Port's superstructure is underdeveloped. In view of Colombo's heavy dependence on transhipment for its survival port facilities have to be upgraded to an acceptable levels. Whatever are the impediments to efficient and effective communication between the Port Authorities and the various representatives of the shipping community, as well as to the expeditious handling of cargo must necessarily be removed as a matter of urgency. The absence of proper communication channels leads to ad hoc handling and re-stowing of containers, and also affects inter-terminal trucking, and relations between container terminal operators, shipping line agents and inland transport carriers. Crane productivity is also found to be generally low and as a result in March 1996, for example, cranes in Colombo averaged between 18 and 22 moves per hour. Inter-terminal traffic management on the otherhand appears to be poor, and most of the inland carriers cause congestion in and around the Port. This problem, it is claimed, is due to a lack of space as well as to the poor management strategy of port space at Colombo. (Dassanayake, Op cit 141)²⁶

The solution to the very high berth occupancy ratio and the excessive manpower problem lies most certainly in the mechanisation of cargo handling. As an immediate step towards the solution of this problem a three shift system should replace the present two shift system mainly because the size of labour gangs as at 1995 is 50% larger than that in ports of developed countries. Moreover, the majority of workers are engaged in conventional methods of cargo handling in defence of which it can be argued that in a country of widespread unemployment it may be difficult to declare labour as redundant. The more relevant question to be raised in this regard, however, is as to how such a policy had been in force and was abandoned after 1995. The only consoling factor is that the age structure of the port workers as at 1995 was high and the total number of workers will decrease to less than 3000 within the next 10 years from 1995. This can be made use of as

one of the ways of getting rid of excess labour and of avoiding the replacement of those workers who retire with new hands. In addition the feasibility of providing incentives for workers to retire before reaching the retirement age may also be explored. The policy originally evolved as one of the means to solve the problem of excess labour is reinforced by later developments at the Port such as:

- (a) Fertiliser handled in bags is to be handled mainly in bulk;
- (b) Cement handled in bag and bulk, is also expected to shift to bulk to a greater extent; and
- (c) Conventional cargo handling will be further mechanised and transformed to more labour saving methods.

With regard to container handling presently at the JCT and the QCT there seems to be no serious problem. But in order to cope with the extra operational activities and further port development in the future it is absolutely necessary to continue the upgrading of operational skills. However, when extra workers are necessary to deal with the projected increase in container throughput it has to be met by internal transfers within the SLPA through a systematic training programme (OCDI/JPC 1995, 3-2-9-3-2-11).²⁷

The mechanisation of cargo handling and improving productivity no doubt are important but no means the only ones inviting SLPA's attention. The Authority must also gear itself to prepare the Port of Colombo to meet the demands of increasing volume of general cargo and the increasing container throughput which it will be called upon to handle with the anticipated expansion of the economies of the region, The report of the Japanese team of experts in 1995 predicted a higher container throughput for Colombo than any South Asian country for the years 200,2005 and 2010 (See Table 7.12). Similarly an equally remarkable increase in break-bulk cargo is expected (see Table 5.6 Chapter V). Looked at from past experience, there is no doubt that the predictions, as was the case earlier, will materialise earlier

than expected. The Colombo Port Development Plans of the eighties were to meet the traffic demands rather of the immediate future than of the distant future. In scale, traffic projections made in the nineties for Colombo, on the other hand, were very much more than those done in the previous decade. Similarly, the forecasts of future demands of container traffic, for example, show the following results which alone are sufficient proof of the magnitude of the problems that the SLPA would be called upon to solve.

- (a) Container throughput is expected to reach 1.6 million TEUs in 1997. The potential demands are estimated as 1.9,2.7 and 3.6 million TEUs in the year 2000.
- (b) Of them, transhipment containers may account for a share of about 72 to 73%.
- (c) The capacity of the Port of Colombo in the year 2000 and thereafter is assessed to be 1.8 million TEUs which is not enough to absorb the potential demands stated above. (Ibid 4-a1-2)²⁸

Table 7.12
Forecast of Future Container Throughput
South Asia and Colombo (1000 TEUs)

Region/Country	1997	2000	2005	2010
South Asia:				
India	1,140	1,420	2,020	2,890
Pakistan	840	1,030	1,440	1,950
Bangladesh	320	440	690	1,010
Total South Asia	2,300	2,890	4,150	5,850
Colombo Export	210	260	370	510
Import	210	260	370	510
Transhipment	1,150	1,410	1,930	2,620
Total Colombo	1,570	1,930	2,670	3,640

(Source: OCDI JPC - Table 3-1-7, p.3-1-30)

What worries at the Port of Colombo is not merely providing additional capacity to meet the demands of projected port traffic. In order to safeguard its hard earned position as a transhipment hub in South Asia the Port also has to equip itself to meet the requirements of post-Panamax or vessels with a carrying capacity of over 6000 TEUs. The presumed dimensions of a vessel of this type are taken as 300-320 metres in length 13.5-14.0 metres in draft and 40-43 metres in breadth. Fortunately for Colombo the Master Plan prepared by the OCDI/JPC in 1996, not only took these developments into account but also the very likely impact on the Port of the economic boom taking place in the South Asian region by way of an increased growth in the transhipment business as well as a significant growth in the country's own import-export trade.On the basis of these factors, the container throughput at the Port of Colombo is estimated around 2.3 and 3.6 million TEUs in the year 2005 and around 3.8 and 6.7 million TEUs by 2015. It is also shown that the annual capacity now available would in no way satisfy such increase in container throughput. Even when the JCT IV was completed at the end of 1995 the annual capacity of the JCT, QCT and NP terminals reckoned to be only 1.5 million TEUs. Subject to the rehabilitation and development in handling productivity the capacity in the year 2000 is approximated to be only 1.9 million TEUS which may fall short of the capacity requirements by that year.

Apart from those of congestion and the need to expand capacity there are also other problems such as: curved fairway; very narrow entrance and short shipping distance; little under keel clearance in the approaching channel and basin; shallow North Channel; and slender container yard (QEQ). The operational problems found to be were extra cost for interterminal transportation between JCT and QCT, less priority to feeder vessels, hidden cost other than the tariff and productivity of cargo handling.

Having identified capacity expansion as the issue to be resolved immediately in that is as to how that could be accomplished. Further physical expansion at Colombo is constained by the breakwaters enclosing the harbour, and hence, it is to be settled in three ways. One is the development of the Galle Port as a supplement to Colombo serving vessels with cargo from and to the Southern Province. Initially that port is to concentrate on bulk and break-bulk carriers. Whereas transhipment trade is concerned, efforts are to be made to expand facilities at Colombo so as to enable the Port to enjoy economies of scale. This is to be achieved by giving priority to what is known as the South Port Development,a project recommended in consideration of construction cost and the time factor. This project while facilitating the expansion of OEO container terminal to the outside is also expected to open the way for the construction of new deeper berths, Finally, the North Port development is proposed primarily because it could be done economically after the completion of the South Port and it will also afford shelter to the North site. Another factor that influenced this decision is that it shall be flexible in keeping with the demand for cargo throughput (OCDI/JPC 1996, 1-2).29

These project proposals are significant not only from the point of view of capacity expansion but also in the formulations for the first time, of a national ports and shipping policy. In fashioning such a policy it paved the way for Sri Lanka for the first time to look beyond Colombo in the development of port facilities which itself can be considered a significant landmark in the annals of port development in Sri Lanka. Unlike other sectors of national importance independent Sri Lanka lacked a national ports and shipping policy until as recently as 1997. For that matter none of the economic plans produced since independence placed emphasis on an area of development so vital to an import-export economy like Sri Lanka. The present study, can, therefore, be incomplete unless some reference is

made in respect of the evolution of such a policy and discuss briefly as to how the recently declared national ports and shipping policy would affect the destiny of the Port of Colombo.

Ports and Shipping Policy

The British policy of concentrating port investments on the single Port of Colombo and of using the same as the only gateway for Sri Lanka's overseas trade saw no change after independence. It was such a policy that stifled the development of the two once internationally reputed ports, Trincomalee and Galle and pushed them into positions of insignificance in Sri Lanka's overseas trade and shipping. Neither were attempts made to develop the relevant hinterlands to create an economic environment conducive to their development at least to serve their respective regional interests. In port management and administration the basic feature had been to make the ports to be run as a Government department except stevedoring and port tally services which as discussed in the preceding chapter were in private hands until 1958 and 1967 respectively.

In the absence of a national carrier Sri Lanka's overseas trade up to the early seventies was carried in foreign vessels mainly by Conference Liners. Because of Conference behaviour in freight increases and demurrage charges etc. the need to develop a national carrier arose in the fifties. but it was not until the early seventies with the establishment of the CSC a fully state owned shipping venture that a policy decision regarding national shipping was taken. The basic feature of that policy was the granting of preferential treatment to the national carrier in cargo reservation that was exercised through the CFB (Dharmasena 1989). The further liberalisation of trade that took place from the late eighties made that policy unacceptable and hence to attract more shipping to the Port the policy was abandoned in 1992 and thus saw liberalisation of shipping as

well. Although liberation of shipping affected the commercial viability of the national carrier it nevertheless helped attract more foreign vessels to Colombo. What emerges from the preceding narrative is that independent Sri Lanka lacked a national ports and shipping policy. As the economic forces at work since the late 1970s gathered momentum the need for a well defined ports and shipping policy became a matter of urgent concern to the policy makers.

The Japanese Study Team that visited Sri Lanka in 1994 to report on the Enhancement of Port Management in Sri Lanka went into all aspects of port management and called for the formulation of a national port and shipping policy, especially with regard to physical planning and management. The Study Team categorically laid down that what is most important for an island country like Sri Lanka is to formulate a national policy to promote the country's port and shipping activities. The purpose of such an exercise is to help increase the transparency of the port and shipping administration/management in the country, to help people understand their country's port and shipping policy and to assist shipping lines, and other port related services here and abroad to obtain reliable information on Sri Lankan policy regarding port and shipping.

The immediate attention according to the policy statement is to be given to the further development of the Port of Colombo as an international hub calling for both the establishment of an efficient port administration/ management system and the development of sufficient port capacity. With regard to such aspects of port development, the report made some preliminary observations about the existing situation at the Port. The completion of the JCT I & II by 1987 it was pointed out attracted a large volume of containers rendering the existing capacity of the Port insufficient by increased congestion, increased ships' waiting time at berths leading to levy of

surcharges on Colombo, as well as the diversion of ships elsewhere. However, it was envisaged that with the completion of JCT III & IV congestion would ease and service level will improve. Problems will perhaps arise again it was stated as many containers handled through other ports will switch to Colombo and such extra capacity provided by additional berths will soon be saturated. It signifies that the problem of port capacity at Colombo will remain a permanent feature unless concrete measures are taken towards its solution. Since no more space is left within the existing waterfront surrounded as it is by the breakwaters, extension means either construction of a new basin with large scale breakwaters adjoining the existing harbour or shifting some of its activities to other ports in Sri Lanka. When considering the location of Colombo and other ports, it was accepted that the important role of Colombo as a container hub port will continue to remain in the foreseeable future.

The most plausible way of ensuring such a strategy appears to be the construction of a large scale breakwater so as to create a calm basin costing billions of rupees. Such facilities have generally a very long service life as seen in the case of existing breakwaters at Colombo. Investment on such facilities normally has economic feasibility but is financially difficult because no direct revenue is generated. Capital expenditure for such basic infrastructures with long life spans may, therefore, need special financial arrangements instead of ordinary loan conditions. It is also stated by the Study Team that, it is difficult, as it is, to determine the time, location and size of such development. All the same, it cannot be avoided because of Colombo's dominance in the world network of sea lanes. To disown such a destiny it was stated in no uncertain terms will not only result in the loss of transhipment customers but also the opportunity to make use of the main-line mother vessel services for Sri Lanka's own trade promotion. Under such circumstances the Study Team suggested a major policy

measure regarding the future roles of the three ports, Colombo, Galle and Trincomalee (OCDI/JPC 1995 S2-5,Sa1-3-4a-1-5).³¹

Future Roles of Sri Lankan Ports

The assignment of different functions to each of the three ports, as recommended in the report of the Study Team is considered as a matter of strategy and comprehensive studies were found to be necessary to finalise their roles and what had been recommended to be assigned to each port provides only a basic direction for further studies. Accordingly, Colombo is to continue to serve as the principal port for both domestic and external trade as it now performs. It should also start to serve as a full-fledged hub port in the regional and the global container transport networks, which to some extent it has already started to perform. In fulfilling the functions assigned to Colombo, the concentration of commercial and industrial functions around the Port should be made use of to form a regional commercial centre in the global economy.

With regard to Galle and Trincomalee, it is suggested that the two ports should be allocated their basic roles within their respective comprehensive regional development schemes and not merely in terms of port and shipping alone. The argument being that financial viability of operating both successfully, could hardly be ensured, if port development is carried out in isolation unaccompanied by sufficient sectoral growth. Conforming to these requirements Trincomalee is expected to continue to serve as an industrial port as it does now reserving such sea and land space currently at low zero utilisation for the future. In the meantime, extensive land and water areas could be used for eco-tourism with clean beaches.

In addition to the role it should play in line with regional development, Galle is also assigned the function of a domestic and external trade port supporting Colombo. The team of

experts, therefore, recommends that the very first step to promote Galle is the full utilisation of the existing port capacity which is roughly estimated around 250 to 300 thousand tons per year. In formulating a port development plan for Galle it is also suggested that a careful comparison between the Galle Bay and the Bay of Weligama be done to select the site that could be put to optimum use in considering a port development programme in the Southern Province. The Weligama Bay, it is pointed out, is much larger in size than the Galle Bay and which suggests that the investment in the former can be more efficient than in the latter. (Ibid).³²

The JICA team of experts after an intensive study on the development of the Port of Galle in 1991 echoed similar views with regard to the role that should be assigned to it. It was accepted that from the point of view of international shipping, the Port of Galle offers a very advantageous location in the Indian Ocean than Colombo, a potential that could be made use of to make it a more productive hub port than the latter. In terms of its distance from the main shipping routes it was pointed out that the Port of Galle will serve as a distribution terminal for bulk cargo such as wheat in South East Asia by using its locational advantage. In the context of a national port development policy, the JICA team of experts while accepting the great significance to Sri Lanka of developing a new port at Galle its assigned role to repeat what had been stated earlier is to be to supplement the Port of Colombo for the time being.

The development of the Port of Galle, is also of great significance in view of the development of the Southern Province which has received priority by the Government of Sri Lanka. This province remains economically backward compared with the Western Province and lacks the necessary industries capable of absorbing the highly educated labour force. Industrial development, therefore, is to be facilitated as soon as possible for economic development of the province. On

the otherhand, the Galle Port Development Project would economically be marginally viable unless it is preceded by the economic development of the Southern Province. The construction costs it was stated would be higher due to the need for a long breakwater to secure calmness in the basin and the hinterland area of the port is under-developed. (JICA 1991 224-228)³³

These guide-lines thus suggest that Colombo is to continue as a regional hub port and eventually developed into a hub port in the regional container net-work and the ports of Trincomalee and Galle to play complementary roles to Colombo until such time as their hinterlands are developed and the environment becomes attractive for international shipping lines to call on them. To conform to the guide lines, the development of the Port of Galle has to be accomplished in two ways to phase out investments. First the development of the Southern Province should accompany or precede the development of that Port. The improvement of the Port on the otherhand, should be done in stages in keeping with the growth of the tonnage of shipping and the volume of cargo. The indications are that these broad guide lines provided by the two teams of experts (JICA 1991 and OCDI and JPC 1995) seems not to have been strictly adhered to. Hence the likely impact on the Port of Colombo in the event of implementing the recently declared national ports and shipping policy calls for some elaboration. One such instance is the proposed development of the Port of Galle.

Galle Port Development Project

In 1991, the JICA team of consultants headed by Haruo Okada-Executive Director of the Overseas Coastal Area Development Institute of Japan submitted a Master Plan to develop the Port of Galle at a cost of US\$ 740 million and to be completed by the year 2005. Because of the heavy capital

investments involved four alternative plans based on the Master Plan, too, were prepared for consideration any one of which could be executed at a lower cost. (JICA, 1991).34 Out of the four, the Galle Port Development Project which is the fourth to cost US\$359 though became acceptable but so far no positive action has been taken to implement it. The delay in executing the project apparently is due to certain controversial issues that arose with regard to the award of the contract. In the meanwhile the development of the Port of Galle is given also received priority in the national shipping policy declaration of 1997. The policy document while accepting inter-alia that the development of Sri Lanka's external trade has centred around the Port of Colombo states that unfortunately it is the only port that can presently handle containerised cargo. Therefore the urgent need for building container facilities at a second port.at Galle adjoining the present one received more weightage. At the same time it is also accepted that the development of such facilities is cost intensive and domestic cargo alone, it is believed, cannot generate sufficient revenue to make it an economically viable project. To overcome that problem the feasibility of allowing container facilities to cater to transhipment cargo too was given consideration in the project proposal. From the point of view of regional development a fundamental objective in the development of the Port of Galle as spelt out in the ports and shipping policy is the economic growth of its hinterland. In addition there is the expectation that infrastructure to be built for container handling, it is claimed, would enable the existing and new areas in the harbour to be developed for handling conventional and bulk cargo as well as using those areas for other maritime related activities. When these factors are taken into account national shipping policy on Galle means primarily the development of the Port of Galle as a multipurpose port which will cater to transhipment and domestic containerised cargo as well as conventional cargo. The port, moreover, is to provide shipping lines with the required maritime services. The final objective as spelt out in

the policy document is of developing that Port in to a hub port with infrastructure facilities capable of transforming it to a multi-purpose port. The achievement of that strategy encompasses the development of the existing Port of Galle as well as constructing a new port. The proposed new port is to be equipped with a container terminal with three berths developed on BOT basis. When completed, the terminal is expected to have a handling capacity of one million containers. (Ministry of Shipping, Ports,)³⁵

The Galle Port Development Project that is being accepted for execution but action is being delayed due to reasons given earlier and the new port with container facilities are to be run on BOT basis. The main advantages of the BOT model in running the port can be summerised as: gaining the new technology of port operations and the know-how to utilise human resources from foreign countries; and improving the profitability of the project and the productivity of the operation and management through the effects of privatisation. Another claimed advantage of the BOT model is that, when it is difficult to attract investment at national level, this model is the best choice because the SLPA does not have to raise the funds for construction expenditure and the investment cost does not have to be borne by the Government and the SLPA. The construction costs also might decrease through the effects of privatisation.

However, from the investor's point of view the profit margin of the project must be at a level high enough to merit the investment risk that companies joining the project stake. When the viability of the project is low and it is difficult to guarantee sufficient profits, the BOT model in port management can give rise to various problems. Moreover, in adopting the BOT model, the Government must offer incentives to the companies, for example, reducing taxes etc. and such problems must be solved at Government level.

In the light of what had been said about Galle's commercial viability it is also obvious that the advantages of managing the

port on the BOT model are outweighed by disadvantages. Since the Economic Internal Rate of Return (EIRR) is very low, it is likely that private companies would experience, at least initially, difficulties in raising funds. In such situations, it is inevitable that incentives from the Government are necessary, more than in the case of the public autonomy model. It therefore means that the SLPA has to bear the losses from the incentives to the disadvantage of the Port of Colombo which as will be discussed later already subsidises the losses of Galle and Trincomalee ports. (JICA, 1991 op cit 325).³⁶

A relevant question to be raised in this regard is whether the SLPA since its establishment in 1979 at any stage encountered any difficulty in raising investment funds from international agencies? The answer is in the negative as in every stage of the container development of the Port of Colombo the SLPA encountered no such problem. On the other hand, the financial position of the SLPA was never weak. The SLPA operates and manages all port activities including those of the container terminals at the Port of Colombo with its own work-force. It also maintains a training institute which keeps the workers upto-date with the latest marine technology. Besides, the SLPA is considered to have sufficient human resources and operating technology to manage activities of the Port of Galle without resorting to outside sources. Therefore, the logic that the SLPA is the organisation best equipped to manage this port without causing problems for Colombo can hardly be contested

In this regard the observations of the National Development Council are worthy of being considered in the development of the Port of Galle. To ensure the development of this Port the requisite facilities such as container infrastructure, railway infra-structure, roads etc. also must be developed so that bottlenecks would not occur in cargo handling operations. Otherwise potential users of the port might approach other competing ports in the region to Galle's disadvantage.

Moreover, to ensure that marketing criteria such as pricing and market promotions are done in such a way that there would not be conflicts between Colombo and Galle ports. Elucidating further it was pointed out that both operations would be in jeopardy in the event of undercutting of prices at each port in their simultaneous attempts to boost their cargo handling revenues. (The Island, December 4 1997).³⁷

In the final analysis the development of Port of Galle on the western coast of Sri Lanka as Colombo is and which is a long cherished project by itself is a historic decision in consideration of the emerging scenario at Colombo as well as the development of the hitherto neglected Southern Province. From the point of view of ports and shipping policy the two controversial areas nevertheless are the specific role assigned to Galle and the management system which could have adverse effects on Colombo. Therefore, in the national interests the most sensible step is a re-appraisal of the Galle Port development scheme in the light of these controversial issues.

Quite apart from attention being drawn on the development of the west coast port, Galle, the development of some east coast ports has also become part of official policy. With regard to Trincomalee the decision is to develop it on the basis of a National Master Plan as a multipurpose port dealing with cargo handling and shipping-related activities which are identified as:

- (a) Break-bulk and bulk handling;
- (b) Ship repair, boat and ship building, ship broking, bunkering, salvage and towage;
- (c) Tourism-related marine activities as marinas and pleasure craft; and
- (d) The development of facilities to attract entrepot trade.

As a short-term measure the provision of cargo handling facilities based on the demand as well as of an alongside berth in the China Bay is being given priority. In the absence of a developed port in east coast Sri Lanka the improvement of the Port of Trincomalee brought no opposition. So is the development of the Port of Kankesanthurai to handle bulk and break-bulk cargo mainly to reserve the industries and the region's domestic trade. The policy decision to develop two new ports at Hambantota and Oluvil, on the otherhand has raised a number of controversial issues regarding the economic wisdom of the decision. In the case of the decision to develop a port at Hambantota, so far no positive action is being taken and therefore it seems premature to comment on it at this stage.

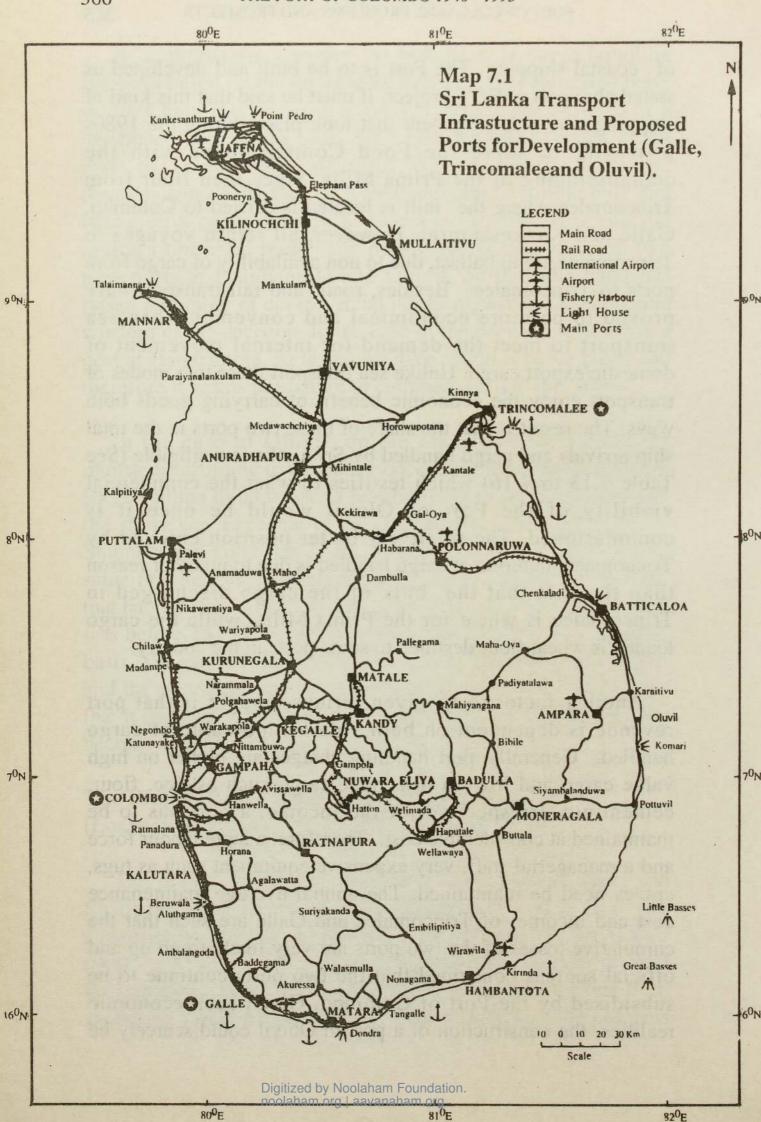
In the case of Oluvil, on the otherhand the cabinet of ministers according to the policy document, has already allocated Rs.23 million to undertake a feasibility study on this project and the study was expected to be submitted in 1997. (Ministry of Shipping and Ports. 1997, 20). Strangely, a port in Oluvil in the same province as Trincomalee and which is not far away from that habour (See Map 7.1) and not even a roadstead as Colombo was before 1875 is being considered for development on BOT basis. The proposal to build a port in a hitherto unknown locality and the economic benefits to be gained from it are so negligible that it does not justify a huge investment for its creation and has become a highly debatable issue.

The Proposed Development of Port of Oluvil (Location- east coast on latitude of Negombo 7° N)

The policy statement issued by the Ministry of Ports and Shipping and as quoted by the media states that the construction and the development of the port of Oluvil as a coastal port is to handle bulk and break-bulk cargoes to meet the consumer needs of the region. The sustenance of this Port, according to the policy statement thus depends on the progress

of coastal shipping. The Port is to be built and developed as stated above as a BOT project. It must be said that this kind of shipping was a development that took place during the 1980s primarily to serve the Food Commissioner with the commissioning of the Prima Mills. Since then flour from Trincomalee where the mill is located is carried to Colombo, Galle and Kankasanturai. However, all return voyages to Trincomalee are in ballast, due to non availability of cargo from ports to Trincomalee. Besides, road and rail transport have proved to be more economical and convenient than sea transport to meet the demand for internal movement of domestic/export cargo. Unlike sea transport these two modes of transport enjoy the economic benefit of carrying goods both ways. The result is that the share of these two ports in the total ship arrivals and cargo handled by Sri Lanka is negligible (See Table 7.13 to 7.16) which testifies to what the commercial viability of the Port of Oluvil would be once it is commissioned. The relatively better position enjoyed by Trincomalee in terms of cargo handled is due to no other reason than the fact that the bulk of the cargo discharged in Trincomalee is wheat for the Prima Mills, while the cargo loaded is wheat flour destined to some ports in the country.

Another factor to be given serious thought is that port revenue is dependent on both volume and value of cargo handled. Generally, port handling charges are higher on high value cargo and low on low value cargo such as rice, flour, cement etc. Irrespective of the income, a port has to be maintained at considerable cost. Therefore, a large labour force and a managerial staff, very expensive equipment such as tugs, cranes need be maintained. The annual average maintenance cost and income of Trincomalee and Galle are such that the cumulative losses of the two ports are very likely to go up and official sources confirmed that the two ports continue to be subsidised by the Port of Colombo. Given such economic realities the construction of a port in Oluvil could scarcely be



justified. Moreover, it is a pre-requisite that trade and shipping should precede port development. Government regulations cannot divert shipping especially international shipping to a particular port, since trade together with location that will entice shipping to a port. For coastal transport to be commercially viable, there has to be either a movement of substantial volume of bulk-cargo such as flour, rice and fertiliser or thickly populated consumer centres not accessible by road and rail, as in the Indonesian or Philippines archipelago. This fact also explains the failure of the efforts by the European Union (and environmentalists) to divert cargo movement between European countries, from road and rail, to environment friendly coastal transport. The argument that a port in Oluvil will handle, particularly the bulk fertiliser requirements of the district also seems to be unacceptable.

The annual import of fertiliser by Sri Lanka is around 400,000 MT and quite a large proportion of which is used in the Central, North Central and Western Provinces. The amount used in the Eastern Province where Oluvil is comparatively small, perhaps less than 70,000 tons. Even if the input of fertiliser in the province is increased by 300% the cost of handling by the coastal port and its maintenance will indeed be far above the potential income of that port. A port tariff as well as coastal shipping rates have upper limits, determined by what the trade could bear and the requirement to be competitive with road and rail transport. The expectation that the port is to handle break-bulk cargoes to meet the consumer needs of the region also seems unacceptable when a comparison is made with other maritime districts of Sri Lanka. The population of the rice growing Ampara is around 400,000 as compared with 850,000 in Galle or over 500,000 in Puttalam. The consumer needs of nearly one million in the Galle District, have not been able, as pointed out, to sustain the present Port of Galle. There is no dispute, therefore, that Oluvil will be another liability

Table 7.13

Ship Arrivals-Port of Galle and Sri Lanka (1986-1995)

Galle

Year	Cargo Ships	Other Ships	Total	Total- Sri Lanka
1986	57	02	59	2,784
1987	78	05	83	2,714
1988	64	02	66	2,717
1989	75	03	78	2,801
1990	59		59	3,089
1991	53	01	54	3,178
1992	74		74	3,438
1993	62	-	62	3,631
1994	74	A SECTION AND ADDRESS OF THE PERSON AND ADDR	74	3,568
1995	67	01	69	3,612

(Source: Port Statistics, Sri Lanka series XVI)

Table 7.14
Tonnage of Cargo Handled-Sri Lanka and the Port of Galle
1986-1995
(in 000 tonnes)

Total Sri Lanka	Galle
9,8666,9	168.9
10,037.5	226.0
12,516.6	173.7
11,826.8	213.7
13,028.8	178.4
13,691	219.4
13,531	236.1
16,498.2	254.5
18,097.2	303.0
19,516.9	237.4
	9,8666,9 10,037.5 12,516.6 11,826.8 13,028.8 13,691 13,531 16,498.2 18,097.2

(Source: Port Statistics - Sri Lanka series X,XI,XIII,XV,XVI)

Table 7.15
Ship Arrivals-Port of Trincomalee and Sri Lanka (1986-1995)
Trincomalee

Year	Cargo Ships	Other Ships	Total	Total- Sri Lanka
1986	195	25	220	2,784
1987	284	12	296	2,714
1988	303	21	324	2,717
1989	167	08	175	2,801
1990	176	07	183	3,089
1991	161	34	195	3,178
1992	197	50	247	3,438
1993	204	42	246	3,631
1994	181	62	243	3,568
1995	192	74	266	3,612

(Source: Port Statistics, Sri Lanka series XVI)

Table 7.16
Tonnage of Cargo Handled-Sri Lanka and the Port of
Trincomalee (1986-1995)
(in 000 tonnes)

Year	Total Sri Lanka	Galle
1986	9,866,9	1,180.1
1987	10,037.5	1,013.9
1988	12,516.6	873.5
1989	11,826.8	1,184.2
1990	13,028.8	1,144.1
1991	13,691.3	1,189.4
1992	13,531.3	1,338.5
1993	16,498.2	1,531.4
1994	18,097.2	1,650.9
1995	19,516.9	1,865.6

(Source: Port Statistics - Sri Lanka series X,XI,XIII,XV,XVI)

to be subsidised by the Port of Colombo. Such additional subsidies would mean extra cost to be borne by the users of the Colombo Port, particularly the country's foreign trade. (Ibid)³⁸

The problems affecting the future prospects of the Port of Colombo do not seem to end with such issues in port development policy. There is the current issue in Sri Lanka regarding the intended port privatisation programme to be effected beginning with the privatisation of the QEQ. The consensus, among those interested in port affairs in Sri Lanka, again according to media reports, is that if the policy decision to privatise ports initially with the privatisation of the QEQ materialises its effects also on the Port of Colombo would be disastrous even to the extent of Colombo's position in South Asia as a regional hub port running into jeopardy.

Port Privatisation - the QEQ

Since 1987 the UNCTAD and the World Bank have made extensive studies on the commercial risks borne by developing countries' ports, particularly in respect of container terminals. In developing country ports, the Port Authorities generally act both as owner of the container terminals and their operators. It thus carries the full weight of the potential commercial risk, although ultimately any negative results are passed on to the national economy. There is no way that the ports in the developing countries with their increasing tariff to lessen the commercial risks largely because of the strong bargaining powers of shipping lines with their feeders and the gradual disappearance of smaller or medium sized lines. Hence the number of potential shipping lines which a container port can attract is on the decline, whilst at the same time each operator constitutes a much bigger potential client. In addition, developing countries are also faced with the problem to provide, at the shortest possible notice specialised and increasingly sophisticated facilities to meet 'shipping lines' real

or speculative demands. But the meagre financial resources coupled with the lack of technical knowledge had made the Port Authorities of developing countries to respond to such demands an uphill task. The inability to forecast world growth of trade and shipping on the otherhand, has resulted in the ports of developing countries either having over capacity or under capacity in port facilities. All these factors have contributed to ports of developing countries of running very high commercial risks. This was realised by some developing country governments, as far back as in 1987 and compelled them to abandon their traditional all-embracing responsibilities and prerogatives in port matters, on the one hand, by increasing the obligations of the main port users (shipping line operators) and on the other, by limiting the Port Authority's role to one of a 'land lord port'. The modus operandi of doing it either through lease agreements or any other way is not intended to be discussed at this stage. (UNCTAD 1987)39

In more recent times there is also a trend towards commercialisation of ports in developing countries. The reasons being increasing capital intensity in shipping and connected port facility requirements, greater integration of shipping, port and inland feeder transport, and a higher degree of concentration in the international transport industry. These have caused many ships or transport operators or cargo owners to get involved in port and terminal ownership and operations.

Considerations such as these have led some countries as Malaysia to introduce policies for wholesale privatisation of their ports, with Port Kelan largely privatised and plans for commercialisation of other ports and underway. Many other nations including Thailand, Indonesia and the Philippines as well as other nations in South America face the problem of massive new port infra-structure investment requirements, at a time when public debt is rising and priorities increasingly diffused. Consequently, commercialisation and privatisation of

ports is being considered as an alternative means of financing new port investments. (Frankel, 1992, 201)⁴⁰

The Word Bank Development Report on infra-structure development has made a detailed study on the ownership of infra-structure services. One of its main findings is that the delivery of infra-structure services usually takes place in a market structure with one dominating characteristic, the absence of competition. In developing countries, most infra-structure services, the report says, are provided by centrally managed monopolistic public enterprises or government departments. The result is that the pressure that competition can exert on all parties to perform at maximum efficiency is lacking. (World Bank, 1994, 6)⁴¹

There are also the developments taking place in port management in the neighbourhood, particularly in India. The proportion of garments, shoes and handicraft exports shipped by air from Northern India had quadrupled as, land and ocean transport systems are no longer able to meet demanding delivery requirements. The reason being that, India's ports have been slow to adapt to containerisation and are subject to regulatory delays and, in consequence, freight transport to the United States is one third more expensive from Indian ports than from Bangladesh or Singapore. (Ibid 18)⁴²

Factors such as these together with financial reasons have pushed India in the path to commersialisation of her ports. Already Indian Port Trusts have been advised by the government that there will be no public money available for projects and is advising the Trusts to seek funding by floating bonds or borrowing capital for projects. This is widely seen as another step in the direction of privatisation of ports, as well as a reflection of the difficulty the government has had in getting loan repayments from the ports (Fairplay, January 1994, 25)⁴³

These are arguments no doubt that make a strong case for the privatisation of ports in the developing countries as a whole but their validity becomes contestable in application to one like the Port of Colombo. In prefacing the reasons against the privatisation of Colombo's QEQ which is officially yet to be confirmed but according to news reports seems to be almost a certainty, it must be pointed out that historically Sri Lanka's ports including its premier port, Colombo continued to remain as Government administered enterprises. This had been the case throughout British administration of Sri Lanka. Similarly, the development and maintenance of Sri Lanka's transport network (roads and railways). The transport network was planned by the state in such a way as to make the whole country the hinterland of the Port of Colombo. This was despite Imperial Britain's adherence throughout to laissez-faire including the running of some public utility services. Because the Port of Colombo served as the gateway for almost whole of Sri Lanka's trade it naturally became the life line of Sri Lanka's economy and hence the Government had a great responsibility to ensure its efficiency. There was also the defence argument in favour of ports coming under Government jurisdiction which was strengthened by Sri Lanka's location in the sea-lanes of the Indian Ocean. The experience in the two World Wars more than justified the defence argument in favour of Sri Lanka's ports remaining under Government control.

With independence the validity of the argument for Government control of transport infrastructure facilities became more forceful than ever before. Industrial peace at the Port became so vital a factor for the economic well-being of the country that what remained as private enterprise was also brought within the sphere of Government control in the post independence period about which had been dealt with earlier. With port efficiency receiving greater weightage in promoting the cause of the open economy policy after 1977 the SLPA, as a statutory body and as the single line of command over ports in

the country was formed in 1979 for the purpose about which reference was also made earlier. It is to the credit of the SLPA that at no time did it find capital a serious problem to undertake massive infrastructure development programmes undertaken because funding was readily available on concessionary terms from foreign sources like the OECF of Japan. Consequently, the container facilities provided and the level of productivity that the Port of Colombo achieved enabled the SLPA to reap dividends in a few years which speaks very high of the Authority's management efficiency. Within a period of less than fifteen years the Authority was successful in placing the Port of Colombo in the world container map by elevating it to the 28th position by 1995 among the world league of container ports from that of the 139th position it held in 1979. What is more, in contrast with the past performance when very often the Port of Colombo was a financial burden to the General Treasury the post 1979 period has been a story of profits and that was also after contributing considerable sums to the consolidated fund, loan repayments etc. It must also be mentioned that the SLPA maintained that level of financial buoyancy, as stated earlier after subsidising heavy losses incurred by the two ports, Galle and Trincomalee. One cannot also underestimate the invaluable role that the SLPA played in contributing to ease the country's perennial foreign exchange problem through the promotion of transhipments. An income analysis of the SLPA in this regard made for the period 1985 to 1993, for example, shows that the rate of increase of domestic earnings in rupee terms was 198% whereas that of foreign earnings was 230%. (OCDI/JPC 1995, $2-3-3)^{43}$

Besides the success story of the SLPA in bringing the Port of Colombo to the present position it must also be remembered that it is not a port that can be compared with any other port in the region for the purpose of privatisation. Unlike most ports in the region, which serve limited hunterlands the Port of Colombo plays a dominant role in the economy of Sri Lanka as

a whole. In the absence of an alternate port well equipped with modern facilities for traffic divergence, disaster would befall on the country with far reaching effects, if for some unforeseen reason, port management went wrong under privatisation. Sri Lanka should not ignore the fact that however efficient the private sectors is its ultimate motive is profit maximization. Hence in the privatisation exercise in operation in Sri Lanka the Port of Colombo should be treated differently and objective judgement should take precedence over all other considerations. To say the least privatisation is not a panacea for the ills of the Port. Perhaps in order to allay the fears of critics of privatisation it may be argued that forced by financial circumstances what is proposed is the privatisation of part of the Port's activity and that the Port as a whole would not be affected by it. But the opponents of QEQ privatisation argue that if the Government went ahead with the proposal, its ill effects would not be confined to that part of the port activity which is privatised but would eventually engulf the Port as a whole.

It is also argued that the claim of paucity of funds for the proposed development of the QEQ is unacceptable as the Japanese Government which in the past played a major role in the modernisation of the Port had signed a soft loan agreement, a few years ago for seven billion rupees for the development of the QEQ and the North Pier. The terms and conditions of the loan to be extended are the same as that provided for the development of the JCT. The Japanese Government also has assured assistance in the form of expertise, technical knowhow etc. Unfortunately, if not for an alternative proposal by the P & O the work in their view would have been well under way, as plans and tender documents seem to have been prepared. (The Island January 22, 1997).⁴⁵

The P & O Consortium (P & O Australia Ltd, P & O Containers Ltd, U.K. John Keels Ltd. and the SLPA which is

known as the South Asia Gateway Terminal (SAGT)) proposal as revealed by the media and seems to have been accepted by the Government for implementation consists of three phased development strategy. The phase one of the strategy envisages the redevelopment of the present QEQ berth 1 to 6 by building 100 m into the harbour basin area and developing this terminal to handle mother vessels and feeder vessels. This project is estimated to cost US\$ 207 million to be raised by the investors. Under phase two ,the construction of the required breakwater and associated dredging, is to be carried out for what is called the South Port, the estimated cost of which is around US\$ 350 million and to be undertaken by the Government with loan funds.

What is to be borne in mind in the proposed three phased port development programme is that phase three which is the South Port development depends entirely on the successful completion of phase two which in turn depends on the government's ability to obtain a considerably large loan. There is scepticism as to how a loan of such amount could be raised and hence uncertainty looms large in the implementation of phase three. For those interests within and outside the Port the most objectionable feature in the P & O proposal in contrast to the JICA proposal is the terms agreed on the development of the QEQ. Also there is differences of opinion regarding the terms entered into and the result is a great deal of confusion. Bala Tampoe of the Ceylon Mercantile Union (CMU) expresses the view that the Ministry of Shipping and Ports in the Letter of Intent (LOI) alleged to have signed is in BOOT terms (Building Own Operate Transfer) terms. If that is a fact it really means that after thirty or forty years Sri Lanka will have to buy her own property from the Consortium whereas under the JICA proposal no such problem is involved and like the JCT it will only involve loan repayments but will continue to be a national asset. (The Sunday Leader, February 16-1997).46 There is also ambiguity as to what is to be constructed and the

equipment to be placed over. Some other source commenting on the procurement of equipment says that the Consortium would be entitled to BOI (Board of Investments) status by virtue of which they will qualify to obtain all equipment on a duty free basis which will be a loss to Sri Lanka. Besides, the Consortium obviously has the right to dismantle them and remove them after the contract period (Sunday Times, February 16, 1997).⁴⁷

A much more serious issue, however, is the implications of developing ports on BOT or the BOOT terms on national security which is being totally ignored. This, according to critics, is all the more surprising since the proposal in the devolution package for state lands to be vested in the Provincial Councils has already provoked serious opposition from several quarters. But under a BOOT port project, politically and economically sensitive land and port facilities so vital for national security, would be virtually vested to be owned by a foreign consortium for all practical purposes for several decades.

In this regard Sri Lanka, must not ignore the role played by S.W.R.D. Bandaranaike as Prime Minister from 1956 to 1959 to complete the country's political independence when he regained Trincomalee Harbour and Katunayake Airport from the British. The take over of the Trincomalee Harbour had an adverse economic impact in the same way the Subic Bay take over by the Philippines Government from the US navy resulting in a loss of several millions of dollars each year by the Philippines. Nevertheless, political, security needs and other benefits from such take over more than outweighed the economic losses. The current security situation, on the other hand, speaks eloquently of Bandaranaike's wisdom and foresight to invest the ownership of Trincomalee Harbour on the Government. In the present state of Sri Lanka a port or a part of a port activity being kept outside Government control is

far more serious a problem to national security than what was decades ago. For example, the current logistical dependence of the security forces on the ports of Colombo, Trincomalee and Kankesanthurai reinforces the argument stated above. Another factor to be considered is that a port could be the gateway for smuggling of weapons, narcotics, besides being used for surveillance purposes. The use of Point Pedro, Velvetithurai and Mullaitivu by the terrorists in North Sri Lanka for such purposes confirms this danger.

The Economics of QEQ Privatisation

The arguments regarding the obvious losses to be borne from the privatisation of QEQ on BOOT terms such as Sri Lanka having to purchase its own property after some years and also of the near possibility of losing equipment etc. are being countered by what is said to be a forceful economic argument. That is the higher profits that the P & O plan promises to the SLPA than that from the implementation of the Japanese plan. To quote a statement supposed to have been made by the Minister of Ports and Shipping.

"if the Queen Elizabeth Quay were to be developed according to the Japanese plan, the SLPA would get an annual profit of US\$ 20 million over a period of 30 years, but according to the P & O plan the SLPA would get an annual profit of US\$ 30 million over a period of 30 years. So it is clear as day light as to why we have opted for P & O." (The Island, November, 29, 1996). 48

The argument though seems acceptable in general terms the factor of profitability becomes weak when an analysis is made by taking other factors into account. It is true that the SLPA currently earns annually an average of only US \$ 10 million as profits from QEQ operations i.e. by handling some 250,000 containers and break-bulk cargo. It is also true that the SLPA

earned a profit of only US \$ 27 million by handling 782,540 containers in 1995 at the JCT. The total revenue from the JCT operation in that year, it is made to be known was US\$ 69 million and direct and fixed cost amounted to US\$ 41.5 million. But the apparent financial advantages an economic analyst says, has to be considered in the light of some other factors as well. In the first place as has been stated earlier and which has now being declared by the ministry document on shipping policy, states that the proposal envisages the development of the QEQ and the new berths in the outer area on a BOT basis. The development of the proposed breakwater it seems, however, would have to be by the Government of Sri Lanka with donor funding.

In order to contribute to SLPA a profit of US\$ 30 million, it is reasonable to expect the BOT operator to earn another US\$ 30 million at least as profits for themselves. The BOT operator moreover is expected to exceed one million containers only after SLPA builds a new breakwater at a cost of US\$ 350 million. Under these circumstances, there is of course no wonder, the economic analyst points out, that the private sector operator is outstandingly more efficient than the SLPA, where the accrual of benefits by the private operator is being considered.

There is the other economic argument in favour of the decision that the P&O will improve the present capacity of 250,000 TEUs at QEQ up to one million TEUs with an investment of US\$ 200 million for which no contribution is to be made by Sri Lanka. Also, the P & O will contribute to the SLPA annually US\$ 30 million for 30 years. However, it is proved that this is an advantage which is apparent but not real. To prove that point the amortization picture when a BOT operator invests US\$ 30 million on a 30 year project expecting to earn at least 10% interest for the first ten years is calculated the results of which are reproduced below. (The Island December 8, 1996)⁴⁹

Year	Annual Capital Charge	Annual Interest Charge	Total
1	1,215,859.00	20,000,000.00	21,215,850.00
2	1,337,435.00	19,878,415.00	21,215,850.00
3	1,471,178.50	19,744,671.50	21,215,850.00
4	1,618,296.35	19,597,553.65	21,215,850.00
5	1,780,125.98	19,435,724.02	21,215,850.00
6	1,958,138,58	19,257,711.42	21,215,850.00
7	2,153,952,44	19,061,897.56	21,215,850.00
8	2,369,347,68	18,846,502.32	21,215,850.00
9	2,606,282.45	18,609,567.55	21,215,850.00
10	2,866,910.70	18,348,939.30	21,215,850.00

According to conservative estimates the BOT operator will have to earn an annual net profit of US \$ 21.2 million from year one up to the 30th year, His total earnings during the 30 years, therefore, will have to be (US \$ 21,215,850x30) US \$ 636,475,500. Hence on a similar estimation the BOT operator will have to earn a total profit of US \$ 21.2 + 30 million or US \$ 51,2 million in order to contribute US \$ 30 million to SLPA by handling one million TEUs each year of US & 51.2 per container as profit. The current all-inclusive SLPA rate (as of March 1997) for handling transhipment containers is US \$ 68.50. This would mean that BOT operator will have to cover his direct and fixed costs with US \$ 17.30 (US \$ 68.50 ñ US \$ 57,20) which is below to be most unlikely, The only way out therefore, would be through an increase of port tariff to accommodate P & O but it could not be a difficult problem since transhipment business is highly elastic or sensitive to tariff revisions.

In the opinion of some trade unionists the P & O has agreed to pay the SLPA annually only US \$ 2 million and not US \$ 30 million. If that is correct, it would mean a loss of US \$ 8 million annually as the SLPA currently earns a profit of US \$ 10 million from the QEQ operations. (Ibid) What is more

alarming is that the Port is to hand over the QEQ extending more than fifty acres of prime land and cranes for a mere Sri Lankan Rs. 100 million per year. Whereas, a few years ago, the SLPA is supposed to have paid Rs. 36 million as annual rent for a small container yard of five acres at Orugodawatta, a short distance away from the Port. (The Island, March 10,1997)⁵⁰

The trade unions which matter a great deal for the smooth running of the affairs of the Port entertain fears of retrenchment of port employees when the BOT operator takes charge of the QEQ. The SLPA presently employs about 1800 employees at QEQ area and P & O has already declared that the terminal could be managed with a lesser number and that they are at liberty to recruit all from outside, Even if all are taken from the existing staff despite the P&O's freedom to recruit employees from outside some will still remain unemployed. In all probability it will be SLPA's responsibility to shoulder this additional burden as they are Authority's employees. This in effect means excess labour for the SLPA to run what remains of port activity and during a time when a reduction of labour for further mechanization of Port operations has become inevitable.

These are not the only issues raised with regard to the intended transfer of the QEQ to the P & O. Operationally, the Port could also face two serious problems. Commenting on this proposal, a port user makes the valid assertion that any development scheduled for QEQ should ensure that the Turning Basin adjacent to QEQ is not reduced, so that ship manoeuvring in the basin and berthing operations at BQ. Moreover, the development of the QEQ container terminal inwards as proposed by the P & O will narrow the channel between the QEQ and the BQ and badly affect manoeuvrability, In contrast the JICA proposal to build the outer terminal will also ensure in extra deeper berths behind the new South West Sea Wall which will also serve as a shelter for any additional development work in the Port. Moreover, considering the width

of the West Entrance which is below the required internationally accepted standards, the entrance will be widened with the proposed Japanese development plan for QEQ at a later stage which will be by loans as in the case of the JCT. There is also the fear that should the Port go ahead with any such BOT deals at any terminal or part, there is the likelihood that only a single shipping company will use the berth while other companies will skip Colombo. This in the present context could perhaps be inevitable. The trend is for shipping companies as was mentioned earlier to band themselves to form various consortia. In the event of one consortium holding on to a berth or berths for days and others of depriving berthing ignoring the principle of first come first served basis will consequently make other shipping companies to look for alternate ports to carry out their transhipment and other operations. (The Island, December 8, 1996)⁵¹ The danger will be that once shipping companies skip a port it will be a very difficult task to lure them back in a scenario where there is competition from other ports unless more attractive incentives are offered. The Port of Colombo in any case cannot afford to forget the multi-user concept in the use of its berths.

In is necessary to re-emphasise here that unlike in the age of conventional vessels, in the age of containers Sri Lanka could hardly depend entirely on its locational advantage for the survival of its ports, as Colombo is to-day. There are the competitor ports like Singapore and those in India which could be used for feeder operations. As a means to avoid feedering costs and back tracking of some container main lines will continue to look up to Colombo as a convenient point of transhipment. Nevertheless, it can be a certainty that a monopoly element creeping into any part of the Port will have a damaging effect on that particular business activity of Colombo.

The progress of Port containerisation has been such that containerised cargo of the Port has come into dominance over

conventional cargo in percentage terms which is a reversal of the pre 1980 period. In aggregate terms, however, the importance of conventional cargo remains, for rice, sugar, fertiliser, food stuffs and other general cargo are still in high demand in Sri Lanka which are discharged at QEQ. (Ibid)52 In 1995 for example, a total of 2,430,304 tons of such cargo were handled at Colombo, Even with the berths at the QEQ being available, there is the common sight of a long queue of ships (carrying these cargoes) outside the Port. This is considered by those in authority, as one of the reasons for the high cost of living in Sri Lanka. Hence one could imagine what the situation would be when the QEQ is given exclusively for container handling without alternative arrangements being made for handling general cargo. (The Sunday Times, December 1st 1996)⁵³ As a matter of fact, the Government is aware of the seriousness of the problem of facilities for the handling of conventional cargoes. When it was revealed that the P & O wanted physical possession of the QEQ as early as possible the SLPA together with the BOI strongly argued that until a solution to that problem was found the request of the P & O should not be acceded to.

According to a political correspondent, it was under these circumstances that authorities took a unanimous decision that the North Pier should be developed, prior to the handling over of the QEQ to the P & O. But that remains unresolved largely due to the problem of financing the North Pier development project. Because, on the one hand, the Government it seems difficult to raise the funds and on the other no private investor would show much interest as the financial benefits would not be very attractive. The OECF of Japan is said to be willing to develop both the QEQ and the North Pier, but is not willing to develop the latter alone, if the QEQ is given to the P & O. (Ibid), December 8, 1996)⁵⁴

The other issue for the SLPA is the problem of relocating some infrastructure facilities in the event of the P & O plan is

implemented. In addition to the conventional berths, container berths and the marshalling area at QEQ, the area that is occupied by the present Passenger Terminal/Baggage Office, Port Health Offices, Harbour Police etc. would all have to be relocated and for the purpose there appears to be no room within the present Port premises. Besides, it is also prudent to view the costs involved in the relocation of all these infrastructure facilities which have been estimated to be Rs. 3000 million. (The Island, November 29, 1996)⁵⁵

The gains made by the Port with the commissioning of the JCT have been dealt with at length in the section on the Containerisation of the Port of Colombo. Very recently a well informed writer on Sri Lankan port affairs commenting on the QEQ privatisation issue paid a glowing tribute to the JCT on its achievements in the following words.

"The JCT, is an achievement where all port workers and officials, in fact all Sri Lankans and even the Japanese can justly be proud of. It is a well planned, well designed, well maintained and smoothly operated container terminal of international standard and above all an investment giving very good returns to the SLPA"

A treasured national asset, a lasting monument to Japan Sri Lanka friendly relations, the JCT is seriously threatened by the proposed management of the QEQ on BOT terms. The JCT as referred to earlier has been developed with Japanese Government soft loans at a very low interest of 2% to the Sri Lankan Government. The Ports Authority is paying back the loan installments with interest at commercial rates to the Government. The SLPA's total loan commitment to Japan's OECF as at present is US \$ 793 million. To service the loans obtained for the construction of the JCT, the SLPA requires Rs. 1.5 billion per annum and current annual income of the SLPA (1996) from the operations of the JCT and the QEQ are

sufficient to service the loans. But in the event of the SLPA losing the income from the QEQ, the Authority will be in a financial predicament and may not be able to service the Japanese loan. (Ibid)⁵⁶

The steady diversion of lines from JCT to QEQ will also be another adverse factor to be taken into account in this regard. The pull of traffic to the QEQ, however, will not be by superior service as such but by lower costs, exemptions from taxes and minimum input of labour. Above all strong links, with mega carriers of the world's two most powerful Alliances - Global and Grand Alliances, a common tariff for both the QEQ and JCT will most likely to be ineffective.

Moreover, frequent labour unrest is unavoidable due to differences in the payments, bonuses, overtime etc. between the two container terminals, one operated by the SLPA the other by the Consortium. Depending principally on transhipment business, the BOT operator may also resort to tariff manipulations to the disadvantage of the JCT. Thus cannot a scenario of the sort push the JCT, in course of time, to a financially difficult position. If so will not the JCT by circumstances be compelled to be transferred to a BOT operator? Under these circumstances careful consideration should therefore, be given before any decision is taken on the QEQ issue. Otherwise, the remarkable achievements, that the Port of Colombo made during a short period of commissioning the JCT will become part of history and the destiny of the Port will be put in the balance. (Ibid)⁵⁷

Transhipment: The Risks

The major part of the discussion in this volume centered on the spectacular development of Colombo's transhipment trade after the early 1980s from a position of insignificance and the consequent need to provide facilities to accommodate such growing trade. It must however, be borne in mind that this branch of Colombo's trade, very often were affected by vicissitudes of international trade and other external factors which are beyond Sri Lanka's control. Thus the ingenuity of Port Authorities of the colonial era to supplement transhipment business with services such as fuel and water bunkering, victualling and ship repairs about which much had been said in volume one, Hence in a discussion on the future prospects of the Port of Colombo it may be prudent to make an analysis of the possible risks involved in the over dependence on transhipment in a rapidly changing maritime scenario in the light of a study made by one who is knowledgeable on the subject.

Sri Lanka's overwhelming dependence on transhipment trade for the economic survival of the ports could be assessed from the investment allocations to be made on port infrastructure development. The proposed investments for Colombo and Galle for the purpose totals upto US \$ 1.9 billion with the anticipation of handling 5.4 million TEUs distributed among the JCT, QEQ and Galle as 1.4 million, 3.0 million and 1,0 million TEUs respectively. But a research study made in 1995 by the prestigious Ocean Shipping Consultants of UK (entitled Middle East and Indian Sub Continent Containerisation upto the year 2005) has made a container forecast for Sri Lanka under two alternative cases. If the forcasts are realised and the planned port expansion by Sri Lanka are achieved, Sri Lanka could have excess capacity of over two million TEUs by the year 2005. This means that a most conducive environment would by then be created for a rate war between Galle, SLPA and P & O Consortium. This could be further aggravated by the complex and the changing nature of the liner shipping and transhipment business. John E. Ricklefgs, a port expert has stated that transhipment is not only primitive in terms of its economic impact, but its success is its own demise. This he says is the reason why in most cases it is

dangerous to make an investment in port facilities dedicated solely to transhipment. Singapore is already experiencing this theory as lines are making direct calls to Malaysia, Philippines and Thailand without using feeder services from Singapore. In the case of Malaysia, there seems to be evidence that the government pressure has also been exerted to discourage the transhipment of Malaysian cargo through Singapore. The second danger is as a Japanese port expert, Hiroshi Kusaka, says is that because of generally anti-competitive attitude of liner alliances a unilateral action by a liner alliance would effectively reduce the port's viability.

Added to this is the fact that in recent years, as had been the trend throughout the capacity of container ships has increased faster than the increase in the volume of international trade and in consequence, the current generation of ships will no doubt reduce the number of hub ports worldwide and the rest will be reduced to feeder ports. Since the planned expansion of port capacity both in Colombo and Galle are on BOT terms, it can thus be argued that the risks enumerated above have to be borne by the BOT operators. Therefore, the agreements which are being negotiated should ensure that Sri Lanka will not have to bear the losses and that the Sri Lanka Government will not guarantee the loans to be raised by BOT operators. (The Island, March 10, 1997) ⁵⁸

There is hardly any study on Sri Lankan shipping which does not emphasize Sri Lanka's strategic location in the Indian Ocean to attract shipping to its shores. The extent of this advantage, however, had been changing over time. During the World War II, for example, Sri Lanka with its natural harbour in Trincomalee was a good haven and a naval base for Imperial Britain to defend its Eastern Empire. In the aftermath of that war and before containerisation, practically all shipping calling on Sri Lanka called on Colombo for cargo, bunker and supplies on the voyages between East and West.

With the entry of container vessels to the Indian Ocean trade, conventional vessels carrying break-bulk cargo vanished from the scene within a few years. It was at this stage that visionary Lalith Athulathmudali, the Minister of Trade and Shipping from 1977 to 1989 seized the opportunity to make Colombo the hub port of South Asia by attracting container vessels through the provision of modern facilities which included two container terminals, the JCT I and JCT II. However, Athulathmudali, well aware of the dangers of making Colombo depending very largely on transhipment, supplemented it with other branches of port functions such as ship repairs, ship building (with the construction of a 130,000 DWT Dry Dock) ship chandling expansion of the national fleet, off shore services, ship registration and training of sea farers.

The locational advantage cannot serve a port's transhipment business for ever. That branch of a port's business, is also affected by, among other things, policies of foreign governments, shipping, importers, foreign lines and the development of competitor ports with attractive incentives to shipping. Singapore, for instance, now faces competion from Malaysia, Thailand, Philippines and Indonesia. Reference was also made about the fact that the Indian Sub-continent offers an attractive source for Singapore to feed its less attractive terminals which are also off the main sea routes. Again as was mentioned earlier, APL has placed four feeder vessels linking Madras, Visakhapatnam, Calcutta, Haldia with Singapore to divert East Coast Indian cargo from Sri Lanka.

Such being the inevitable risks that a transhipment port like Colombo has to undergo, time is ripe for Sri Lanka's port and shipping policy to be fashioned in such a way as to develop a multitude of auxiliary services to further exploit Sri Lanka's strategic location. As far as Colombo is concerned the most feasible auxiliary services that have a potential for development seem to be ship repairs, ship building, bunkering, operation of

fleets, sea/air cargo services, entrepot trade, ship registration, establishment of ship management companies and sea/air passenger services for tourists. Since some of these port functions are not new to Colombo, what is required is to expand them further to make them commercially profitable. On the other hand, whether these services have been offered traditionally by the Port of Colombo or are to be commenced anew the required investments are relatively less than those for transhipment and are affordable by Sri Lanka. More importantly, these services besides becoming valuable sources of foreign exchange could also avert the possibility of a valuable national asset if for some unforeseen reason turning into a White Elephant.

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Appendix I Revenue and Expenditure, Port of Colombo 1940 - 1995

402		THE PORT OF COI	DLOMBO 1940 - 1995	
Profit/Loss Rs.	-39,562 2,541,982 264,240 -2,179,995 5,493,531	29,102,356 23,544,055 40,694,867 29,531,492 213,993,563	213,993,503 345,275,000 465,496,000 505,458,000 511,014,000 576,771,000 607,153,000 446,268,000 644,217,000 1,055,460,000 1,081,117,000 985,061,000	1,363,345,000 1,363,345,000 1,452,000,000
Expenditure Rs.	36,367,400 38,493,346 44,150,115 54,202,995 62,551,746	N.A 34,816,227 35,660,966 39,728,671 44,942,577 435,949,656	538,135,000 579,305,000 732,308,000 864,225,000 894,213,000 1,119,979,000 1,423,540,000 1,754,779,000 1,912,563,000 2,203,555,000 2,529,356,000 2,888,371,000	3,192,571,000 3,603,758,000 5,129,000,000
Revenue Rs.	36,327,838 41,035,328 44,414,355 52,023,000 68,045,277	N.A 63,918,583 59,205,021 80,423,538 74,474,069 649,943,219	883,410,000 1,044,801,000 1,237,766,000 1,375,239,000 1,470,984,000 1,727,132,000 1,869,808,000 2,253,341,000 2,556,780,000 3,259,015,000 3,610,473,000 3,873,432,000	4,739,581,000 4,967,103,000 6,581,000,000
Year	1967/68 1968/69 1969/70 1970/71	1972/73 1973/74 1974/75 1975/76 1977/78 1978/79	1980/81 1980/81 1982/83 1983/84 1984/85 1986/87 1986/87 1988/89 1989/90 1990/91 1991/92	1993/94 1993/94 1994/95
nditure Profit/Loss Rs.	2,620,104 1,858,919 729,348 1,319,795	412,955 623,116 -1,799,305 1,963,781 5,310,527 7,773,243 3,814,569	2,547,017 1,665,531 1,665,531 5,291,822 6,138,143 7,206,322 -1,628,655 3,740,062 9,049,839 -4,208,966 -1,570,808 -3,818,670 -2,169,446	-3,344,460 -2,550,140 -4,831,762
Expenditure Rs.	N.A 3,263,231 4,489,599 5,499,912 6,630,978	7,317,218 8,215,719 11,792,266 11,721,531 12,173,383 13,279,317 16,219,317	17,222,981 17,222,981 17,388,304 16,424,494 18,175,316 18,080,349 26,193,677 23,071,541 21,144,441 30,816,635 29,690,742 29,314,558 31,813,558	36,338,551 38,608,867
Revenue Rs.	N.A 5,883,335 6,348,518 6,229,260 7,950,773	7,730,173 8,838,835 9,992,961 13,685,312 17,483,910 21,052,560 20,034,191	20,034,191 19,769,998 19,053,835 21,716,316 24,313,459 25,286,671 24,565,022 26,811,603 30,194,280 26,607,669 28,119,934 25,495,888 25,495,888	33,788,411 33,777,105
Year	1940/41 1941/42 1942/43 1943/44 1944/45	1945/46 1946/47 1946/47 1948/49 1949/50 1950/51	1957/53 1957/53 1957/58 1957/58 1957/60 1967/61 1962/63	1965/66

(Sources: CPC, SLPA)

APPENDIX 403

Appendix II

Volume of Dry Cargo Handled by the Port of Colombo 1940 - 1995

(Exclusive of Bank Cargo and Restoring)

Year	Imports Tons	Exports Ton	Total Tons
1943	1,324,398	709,960	2,034,358
1944	1,642,298	552,834	2,195,132
1945	1,819,035	574,898	2,393,933
1946	1,462,246	484,282	1,946,528
1947	1,564,098	540,186	2,104,284
1948	1,649,691	701,305	2,350,996
1949	1,888,164	683,863	2,572,027
1950	1,889,212	711,664	2,600,876
1951	2,061,139	705,606	2,766,745
1952	1,995,688	791,993	2,787,681
1953	2,072,169	865,441	2,937,610
1954	2,052,538	947,613	3,000,151
1955	1,999,375	951,502	2,950,877
1956	2,188,431	879,236	3,067,667
1957	2,079,952	708,248	2,788,200
1958	1,866,716	642,048	2,498,764
1959	2,275,619	548,818	2,824,437
1960	2,260,345	540,355	2,800,700
1961	1,957,555	504,446	2,462,001
1962	2,141,045	508,674	2,649,719
1963	1,941,063	471,903	2,412,966
1964	2,114,866	612,776	2,727,642
1965	2,195,990	679,801	2,875,791
1966	2,365,953	689,260	3,055,213
1967	2,200,956	733,536	2,934,492
1968	2,317,036	757,711	3,074,747
1969	2,218,931 Digitized by Noolah noolaham.org aav		3,008,546

Year	Imports Tons	Exports Ton	Total Tons
1970	2,014,132	754,797	2,768,929
1971	1,836,451	839,686	2,676,137
1972	1,535,243	891,190	2,426,433
1973	1,487,350	864,887	2,352,237
1974	1,477,551	844,759	2,322,310
1975	1,362,824	918,400	2,281,221
1976	1,372,930	999,993	2,372,923
1977	1,840,223	1,009,725	2,849,948
1978	1,979,453	1,040,985	3,020,438
1979	1,025,537	1,069,690	3,095,127
1980	2,318,002	1,154,094	3,472,096
1981	1,813,232	1,144,910	2,958,142
1982	1,925,282	1,414,799	3,340,081
1983	2,474,407	1,453,999	3,928,406
1984	2,892,761	1,639,972	4,532,733
1985	3,325,359	1,809,617	5,134,976
1986	3,942,900	2,390,800	6,333,700
1987	4,575,700	2,894,700	7,470,400
1988	5,728,300	3,655,000	9,383,300
1989	5,285,700	3,384,900	8,670,700
1990	5,815,100	3,808,400	9,623,500
1991	5,419,400	3,823,900	9,244,300
1992	5,526,300	3,659,000	9,185,200
1993	6,858,900	4,612,000	11,470,900
1994	7,517,300	5,326,300	12,243,600
1995	8,171,500	5,710,500	13,882,000

(Sources: CPC; P(c)C; SLPA)

Appendix III
Tonnage of Transhipment, Port of Colombo 1940 - 1995

Tons	772,176	1,168,600	1,812,500	2,627,200	2,281,700	2,527,500	2,600,800	2,531,100	3,367,900	3,893,300	4,117,700				
Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995				
Tons	2,601	4,868	11,402	10,839	5,999	3,265	11,485	27,882	22,918	52,034	153,292	158,852	283,189	426,975	605,267
Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Tons	52,395	30,953	18,008	4,073	2,802	3,579	8,298	1,599	3,158	1,191	3,608	3,456	6,429	4,952	4,341
Year	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	9961	1967	1968	1969
Tons	N.A	N.A	N.A	N.A	N.A	N.A	9,533	22,533	38,520	55,538	63,309	55,459	34,174	50,468	86,093
Year	01940	141 olaha	7 Man o	612043	444 aava	delinah 45	946 am.d	org 19047	1948	1949	1950	1951	1952	1953	1954

(Sources: Port Cargo Corporation; SLPA)

Appendix IV

Volume & Value of Rice Imports, Sri Lanka, 1950 - 1995

Year	Volume (in 000 MT)	Value (in Rs. MN)	Year	Valume (in 000 MT)	Value (in Rs. MN)
1950	498	278	1973	340	270
1951	402	236	1974	298	720
1952	406	329	1975	465	1062
1953	402	324	1976	378	602
1954	410	273	1977	538	917
1955	385	222	1978	187	689
1956	491	264	1979	212	891
1957	523	258	1980	168	882
1958	482	238	1981	168	992
1959	583	283	1982	174	925
1960	528	242	1983	147	765
1961	469	217	1984	38	197
1962	410	195	1985	211	1089
1963	403	192	1986	231	1052
1964	658	326	1987	113	687
1965	280	144	1988	210	1808
1966	693	367	1989	316	3396
1967	355	211	1990	172	1758
1968	370	341	1991	133	1589
1969	309	257	1992	237	2582
1970	480	318	1993	209	2386
1971	295	195	1994	58	655
1972	299	161	1995	9	122

(Sources: Sri Lanka Customs, Central Bank of Sri Lanka)

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Appendix V

Volume Indices of Exports and Imports Sri Lanka (1990 - 100), 1950 - 1995

Year	Export Volume	Import Volume	Year	Export Volume	Import Volume
1950	44.3	44.7	1982	66.6	94.3
1951	44.8	50.5	1983	63.0	103.8
1952	45.4	50.5	1984	73.8	107.5
1953	46.5	51.2	1985	76.3	102.8
1954	48.2	47.6	1986	80.3	103.6
1955	51.0	53.3	1987	79.2	103.9
1956	47.6	59.8	1988	74.4	98.3
1957	46.5	63.4	1989	77.1	92.9
1958	49.3	64.2	1990	100	100
1959	48.2	73.3	1991	101.2	113.2
1960	51.6	72.8	1992	105.2	131.0
1961	53.2	58.4	1993	120.2	153.4
1962	57.2	59.1	1994	131.5	172.1
1963	54.9	50.5	1995	140.9	176.7
1964	60.0	62.0			
1965	62.2	46.9			
1966	56.6	64.2			
1967	58.9	54.8			
1968	60.5	55.5			
1969	57.7	59.1			
1970	60.0	55.5			
1971	58.3	49.0			
1972	57.2	48.3			
1973	57.7	43.3			
1974	49.9	30.3			
1975	60.0	37.5			
1976	57.2	41.1			
1977	52.7	52.6			
1978	56.1	72.1			
1979	56.6	88.7			
1980	60.4	104.7			
1981	63.6	94.3			

(Sources: Central Bank of Sri Lanaka Annual Reports. Indices in these reports have been earch and with 1990 as the base)

Appendix VI
Total No. of Ships arrived and their GRT 1976 - 1995,
Ports of Colombo, Trincomalee and Galle

GRT	(0001)	N.A	N.A	N.A	N.A	N.A	18364	19817	20768	20991	22390	25673	24466	33785	33788	39751	41500	41503	45446	52230	54978	57842
Total No .	1757	1571	1/49	1793	1958	2123	2115	2027	2093	2274	2381	2784	2714	2717	2801	3084	3178	2170	3438	3631	3568	3612
GRT (1000)		N.A	N.Y	N.A.	N.A.	N.A.	4 6	17	69	30	61	129	224	126	166	126	158	180	169	203	265	185
GL No.	17±	38	2.0	17	30	3.1	1. 1.	71	10	10	3/	59	83	99	78	59	54	74		70	14	69
GRT (1000)	A Z	AN	A Z	AZ	N N	1291	1824	1880	1540	1500	0001	1287	1475	1250	6901	952	1027	1263	1416	1410	1433	1665
Trincomalee No.	72	63	73	53	48	186	125	143	161	173	000	077	296	324	175	183	195	247	246	243	647	007
GRT (1000)	13580	13596	14053	16098	17954	17039	17966	18810	19421	20829	7307	72270	22330	13091	32330	386/3	40318	43994	50611	53278	55000	76666
Colombo No.	1668	1658	1699	1808	2055	1858	1890	1934	2052	2171	2505	2335	7377	7540	2040	7647	6767	3117	3323	3251	7775	
Year	9261	1977	8261	6261	0861	1861	1982	1983	984	985	986	987	988	080	000	000	166	992	993	994	995	

(Sources: CPC, SLPA)

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Appendix VII

Year

8 GL Total Tonnage of Cargo handled, (000 Tons) Ports of Colombo 8 Frincomalee and Galle 1975 - 1995 145 127 135 123 137 255 723 576 912 947 11180 1013 873 1184 11189 1138 1138 1138 95.3 95.8 95.0 96.1 96.1 96.1 96.1 87.2 86.0 86.0 86.0 86.0 86.0 89.9 89.9 89.3 89.2 8 Colombo 4033 4126 4637 5498 4982 5711 5711 5831 6638 7338 8517 8517 8797 9383 8670 11706 11956 4231 4306 4881 5693 5183 6013 5949 6425 7040 7622 8534 9866 10037 10430 13028 13691 13531 16143

Chronicle of the Development of the Port of Colombo, 1505 - 1997

YEAR	Major Events
1505	The Portuguese used the open roadstead of Colombo.
1518	The Portuguese established a trading depot and fort at the tip of Galle Buck rock.
1656	The Dutch shipping enterprise supplanted the Portuguese on the coast of Colombo.
1796	The British took Colombo.
1802	Ceylon became a Crown Colony.
1864	The first proposal to develop Colombo Port was prepared. In the next few years rival plans for the protection of Colombo and Galle were designed and discussed.
1871	Mr. Townshend reported favourably the practicability of constructing protective works at Colombo.
1872	Sir John Coode submitted his first plan, embracing with jetties combined and reclamation of the foreshore.
1875 - 1884	"South-West Breakwater" was constructed (4,212 ft. in length)
1878	Sir John Coode formulated design "B" (harbour area of 502 acres).
1880	Major shipping lines transferred the port of call from Point de Galle Colombo.
1880 - 1890	Dredging upto 8 metres.

1883	Harbour revenue was first established.
1885	The Harbour Board was established
1891	Sir William Mathews formulated the North-East and North-West Breakwaters (harbour area of 660 acres).
1894 - 1898	"North-East Breakwater" was constructed (1,000 ft. in lenght)
1896 - 1906	Dredging upto 9 metres.
1892 - 1902	"Patent Slipway" was constructed (upto 1,200 tons displacement).
1898 - 1906	"Graving Dock was constructed (L 700 ft. X B 85 ft. X d 32 ft.)
1904	Trincomalee as British Naval Headquarters in the East was abandoned.
1898 - 1906	Eight "Small Landing Jetties" one "Passenger Jetty" and 18 Coaling Jetties" were constructed. "Coal Depot" was reclaimed 24 acres. "Fishery Harbour" was constructed (with a rubble breakwater 800 ft. in lengh).
1899 - 1906	"Graving Dock Guide Pier" was completed (the only deep water alongside berth, 250 meters in length).
1907 - 1912	"Outside Sheltering Arm" from the S-W Breakwater was constructed (1800 ft. long).
1910 - 1922	"Lock System of the Beire Lake was constructed by the Public Works Department, and later handed over to the CPC.
1913	"The Colombo Port Commission CPC" was created.

1914 - 1923	"Quay Walls for the Lighters" (520 m) " "Warehouses and Jetties in Baghdad and Pettah areas". "Oil Facilities including Kolonnawa Oil Depot and Bloemendhal installation".
	"Bunkering Jetties and Petroleum Product Pipe Lines to Kolonnawa Depot and Railway from the Harbour to main Line" were constructed.
1916 - 1927	Dredging upto 10 m at six berths.
1935	Consulting Engineers proposed for an Inland Tidal Basin (with five berths), which was not implemented.
1938	"Inner Dry Dock" was completed.
1946	Plans for development of alongside berths were formulated and accepted by the Government.
1948	Ceylon became an independent nation as the Dominion of Ceylon.
1949	The designs of the port development scheme were prepared by Coode & partners.
1950 - 1954	"Queen Elizabeth Quay (QEQ)" was constructed (L 915m W 120m, D11m with four Transit sheds and a Passenger Terminal Building).
1950 - 1956	"Delft-Quay" was constructed (Five berths with 8.5 - 10 m depth and two transit sheds and a warehouse).
	"Prince Vijay Quay" was constructed (Two berths with 10 - 11 m depth and two transit sheds and a warehouse.

"Coaster Berths" were constructed (Two berths each 90 m long with 5.7 m depth).

"Oil Dock" was constructed (North Pier: 335m long,

South Pier 300 m long with 11 m depth).

CHRONICLE OF THE DEVELOPMENT OF THE PORT OF COLOMBO 413

1958	"The Port (Cargo) Corporation" was founded.
1961	The Government invited NEDECO which advised the formation of an Authority and drew attention to transshipment trades.
1967	"The Port Tally and Protective Services Corporation" was formed.
1969 - 1980	Extension of QEQ for a Container Terminal was carried out by the Colombo Port personnel (L 300 m, D 12.8 m, Area 3.2 ha.).
1973 - 1981	Dredging of the harbour and reclamation of QEQ container Terminal carried out.
1979	"The Sri Lanka Ports Authority (SLPA) was constituted.
1980	JICA formulated "Master Plan for the development of Colombo Port.
1981	SLPA assigned JCP for full consultancy services of the "Urgent Plan" in the "Master Plan".
1982	"Closed - circuit T.V. network" and "Rail Container Service" were inaugurated.
1982	The first Gantry Crane (Tango 80) at QEQ Container Terminal was commissioned.
1882	"Jaye Container Terminal (JCT) Stage I" was constructed (300 m quay with 12 m depth and 9.75 ha area, a CFS etc.).
1884	"JCT Stage 2" was constructed (332 m quay with 13 m depth and 9.94 ha area).
1984	Four Transfer Cranes (HITACHI) Commissioned at QEQ Container Terminal.

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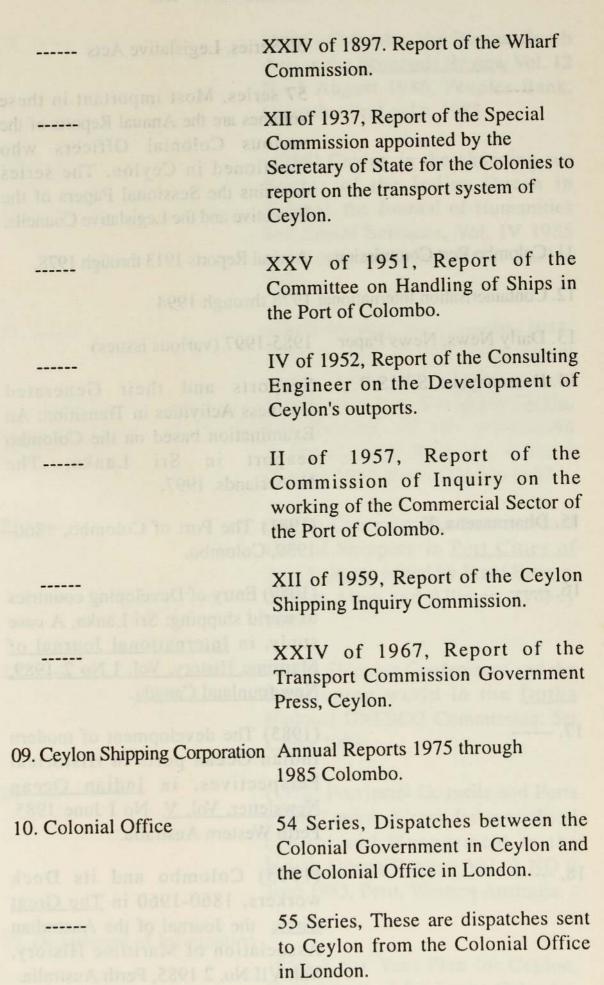
414	THE PORT OF COLOMBO 1940 - 1995
1985 - 87	"Internal Port Road" and "Oil Berth" behind N-W Breakwater were completed.
1987	"SLPA Mahapola Training Institute" was inaugurated.
1988	"Off-shore Installation of the Single Point Mooring (SPBM)" by the CPC Commissioned funded by the Exim Bank of Japan.
1989	JICA reviewed the "Master Plan"
1991	Construction of "JCT Stage 3" started (330 m quay with 3.5 m depth and 17.61 ha area).
1991	JICA made a feasibility study of the Development of Galle Port.
1991 - 93	"Pavement of QEQ container yard" was executed by JICA's loan (52,000 sqm by blocks).
1991 - 93	"Port Access Road" was constructed (1.8 km in length with 13.5 m depth).
1992	OECF provided Special Assistance Sustainebility (SAPS) on Port of Colombo Expansion Project.
1993	Construction of "JCT stage 4" started (330 m quay with 14 m depth and 180 m Feeder Berth with 9 m depth in total 6.56 ha area).
1993	A part of JCT Stage 3 completed (150 m quay with 13.5 m depth).
1995	Inauguration of "JCT no. 3".
1996	Inauguration of "JCT Berth No 4"
1997	Inauguration of New Oil Terminal and Facilities.

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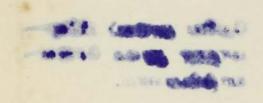
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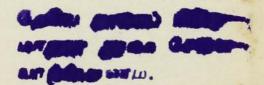
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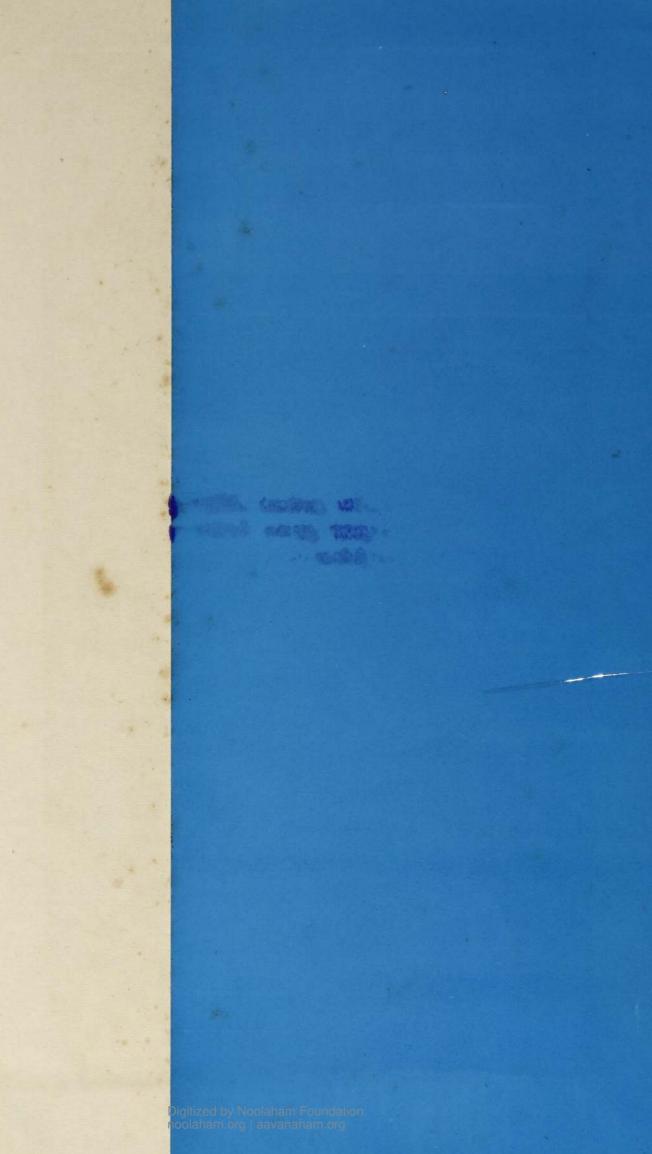
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