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Towards an improvement of the services and operations at the International Port of Port-au-Prince

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WORLD MARITIME UNIVESITY
Malmö, Sweden

**Towards an Improvement of the Services and the Operations
at the International Port of Port-au-Prince**

BY

**Myriam Desrosiers Senatus
Republique d'Haiti**

A dissertation submitted to the World Maritime University in partial
fulfilment of the requirements for the award of the degree of

Master of Science

in

**PORT MANAGEMENT
1999**

Declaration

I certify that all the materials in this dissertation that is not my own work has been identified, and that no material is included for which a degree have been previously conferred on me.

The contents of this dissertation reflect my own personal views and are not necessarily endorsed by the University.

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ABSTRACT

Title of the dissertation: **Towards an improvement of the services and the operations at the International Port of Port-au-Prince**

Degree: **MSc**

Haiti's political instability has greatly affected the country's development. The stagnation of ongoing development has done more bad than good. An misery for everyone and a real dilemma for the society. the country has been unable to:

- 1- allocate or decrease the present degree of poverty
- 2- provide education and employment for the present generation of young people
- 3-expand its inter-related maritime multi-use activities
- 4- undertake sustainable and viable development which will bring dividend to the welfare of the Haitian people
- 5- obtained foreign currencies to wider the perspective of development .

One can then understand that the International Port of Port-au-Prince does not escape to this general situation of deterioration which affects the services offered to customers. As Haiti is an Island which depends greatly on imports for its survival it is understandable that it is of a big concern for the writer, as a Haitian citizen and a civil servant, to attempt to bring her participation to the development of the country.

Belonging to this sector which is very important for Haiti, the writer will then try to make some propositions of a policy which can respond to the need of the port

Firstly a look will review the current situation by going into the present administration, the situation of the port that means its physical distribution , the services offered and the way the operations are carried out in the port area.

Secondly an assessment on the APN and the performance of port operations will be done. As a result this analysis should give rise to numerous deficiencies experienced in the administration and the port area most of which related to bureaucracy problems, overload of employees, lack of trained people , lack of return on investment to make improvement by modernising the administration and the port. The main problems which will be pointed out and their causes will be investigated in the light of knowledge gained by the writer from her practical experience at the port . Also field training exercises, and research and study at WMU will be more then helpful for her in assessing the IPPAP.

To the matters which will be discovered , alternatives solution will be contemplated and closely examined in turn. Eventually a combined solution between commercialisation and a gradual involvement of the private sector will be taken out as being, in the writer point of view, the more likely one, which could bring some improvement to the port sector in the actual context prevailing in Haiti.

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List of Abbreviations and acronyms

APN	Autorite Portuaire Nationale
CDG	Carl Duisberg Gesellschaft
DEEM	Direction des equipments de manutention
FLT	Fork Lift Truck
IPER	Institut Portuaire et de Recherche du Havre
IPPAP	International Port of Port-au-Prince
NPA	National Port Authority
ODEP	Office d'Exploitation des Ports
p	Page
Ro-Ro	Roll-on Roll-off
TEU	Twenty Foot Equivalent Unit
Ts	Service Time
UNCTAD	United Nation Conference on Trade and Development
WMU	World Maritime University
Wq	Waiting Time

Chapter 1

Introduction

Over the last 20 years world shipping has undergone significant technological and organisational changes. Unlike previous developments the implications of these were not confined to the shipping industry but equally affected other modes of transport and transfer points, i.e. ports and inland terminals. Furthermore, developments in shipping technology have been observed in all shipping markets, even though at varying degrees.

As the evolution of more efficient transport systems has been originated in trades between developed countries, it was also the ports of these countries that were first affected. It was only with a time-lag of some 10 to 15 years that these changes were also introduced in developing countries trades, based on the necessity to reduce freight costs and meet the requirements of physical concepts applied by trading interests in developed countries.

The question whether these new concepts such as containerisation and multimodal transport are suitable ones for developing countries or not has given rise to considerable controversy since their introduction. Serious doubts have been raised at various occasions on the wisdom of introducing capital intensive transport systems in countries generally characterised by a scarcity of capital and an abundance of unskilled labour.

Ports in developing countries did accept the challenge of new transport systems and reacted to them. While this reaction in many cases may not have been as

appropriate and efficient as that developed countries' ports, a certain differentiation is required and specific constraints are to be taken into account.

In most of developing countries the reaction of ports to new transport and trade requirements is still inadequate. This inadequacy is due to various factors, such as the lack of finance for both infrastructure and equipment investments, the lack of human capital as well as the often missing political insight into the requirements of a port which may enable it to play its proper role in the total transport chain and thus in the promotion of foreign trade and economic development of a country. Bearing this in mind an account will be given of developments in the transport sector affecting the International Port of Port-au-Prince (IPPAP) as well as of possibilities of this port not only to react to such developments but also to play an active role in the design and implementation of an efficient transport system.

The IPPAP should be able to provide for the movement of goods in and out of Haiti, since no nation can exist on a basis of self-sufficiency, there must be interchange with other countries. Specific demands are made on the quality of performance of this port from the point of view of the ship and its cargo. It must be agreed that the attraction of a port is essentially dependant on its ability to conform as closely as possible with the individual requirements of each and every customer. Nowadays ships are not prepared to wait for the port and the availability of its services, it is rather the port that must wait for ships. Cargo, on the other hand, requires from port a comprehensive port performance among other features.

The port of Port-au-Prince is placed in a detrimental position. Actually, the port has become less competitive over the last two decades, and the situation seems to be worsened gradually at the profit of its competitors, namely the port of Rio Haina (Dominican Republic) and the port of Kingston (Jamaica). This fact has engendered disastrous consequences that are deeply felt throughout the socio-

economic sectors. Obviously, the failure is due to several reasons, some of which are imputable to internal factors (related to the port itself) while others are connected to external factors (particularly socio-politico-economic environment).

The ambition of this paper is to look at the performance of the port of Port-au-prince from a broad perspective of management in a developing country. This approach has been chosen because observations by the writer have indicated that the situation existing in the Autorite Portuaire Nationale (APN) is largely characteristic of government owned port in developing countries as a whole. As this paper progresses, attempts will be made to emphasise issues that seem to be congruent with the central theme under investigation.

Level of performance no doubt is the corner stone which differentiates a good port and a bad one. Among other things the elements responsible for a good level of performance of a port are the equipment, the waiting time, the ship turn around time and one can say above all that, the human resource capability.

Obviously all of those factors deserve special attention because they are interconnected and very complex because in the case of equipment there are high costs involved in purchasing, operating and maintaining it and also it is significant when determining the level of efficiency and cost-effectiveness of terminal operations. Then comes the necessity to introduce a proper equipment policy into the APN. When it comes to consider the waiting time the number of berths available, the number of tonnes per hour per crane and gangs are important elements to look into. The human resource development of course through the organisation itself, the level of knowledge of these employees regarding the port sector and the possibility of training have to be taken into consideration. All of this usually determine the level of performance and reliability of a port and its degree of calling at a port. As Professor

Jean Michel Mancion has pointed out in his lectures of last year the faster the ship turn around time the more this port will be call by ships..

In the light of all of this, the current situation will be analysed in a way that a proper diagnosis can be drawn, and causes pointed out. Considering the ongoing discussion on privatisation of ports prevailing in Haiti, various forms of port reforms will be examined. An alternative solution will be designed which can fit to the APN. Since no reform is easy and can be brought overnight, the option chosen will be flexible.

Whatever the option adopted, only a proper policy for running the port can guarantee the efficiency of the services offered by the port. and the costs-effectiveness of the operations.

Lastly, this topic has been chosen by the writer in order to contribute to the recovery of his port which is drifting too far. Of course this dissertation is not an exhaustive work because it considers the overall without going into all the details because of a lack of accurate data , if not at all. However , it will try to consider how an improvement in the APN policy can bring some competitiveness to the port and then bring back the customers lost prior to the 1986 and 1991 crisis.

Chapter 2

Presentation of the current situation at the International Port of Port-au-Prince

2.1- Introduction

The imposition to import most of our goods which are in principle not available locally force Haiti to have international ports. On the other hand it is the mean of transportation by which the country exports its primary products like : coffee, Cocoa, and some handicrafts products.

The international port of Port-au-Prince was built in 1911. At this time the quay was 610 m long and prolonged by a pier of 183m with a breath of 14.5m which constituted the base for handling the cargo.

The port of Port-au-Prince is indispensable to the development of the entire economy of Haiti. It plays an essential role not only in providing Haiti with foreign trade with other countries but also in upgrading the standards of living of the island inhabitants.

2.2- The Port Management Organisation

The International Port of Port-au-Prince is under the auspices of the National Port Authority which consists of an Administration Advisory Committee and a General Port Management Company.

-The Administration Advisory Committee consists of 5 members who are as follows:

-The Governor of the National Bank of the Republic of Haiti who acts as Chairman.

-The Minister of Finance and Economy who acts as the Vice-Chairman.

-A Representative from the ministry of Industry and Commerce who acts as member.

-A Representative from the Ministry of Transport, Communication, and Public Works who is a member

- A Representative of Shipping agencies who acts also as member.

The Administration Advisory Committee has the mandate of providing port services to foreign vessels, shipping agencies and other users of the International Port of Port-au-Prince.

It can be easily understood that such an administration with so much parties for decision making process is very slow when it is not totally inoperative. Effectively there is no flexibility at all in the organisation of the writer.

The mandate comprises of the following objectives:

- to develop, maintain and operate all the infrastructures, in the port.

-to carry out feasibility studies, to analyse them and then perform projects towards improving the efficiency of the port services.

- to have continuous a co-operation with other maritime organisations which are state- owned and which are interested in the different activities of the port.

- to increase the effectiveness of the services which has a connection with the infrastructures and the port operations.

- to provide both security and infrastructure facilities for the safety of the port area.

-to establish, revise and reinforce if needs be the operations and procedures of the port services in order to captivate higher fund generation.

- to establish regulations which control the fees for port dues, the different rights that consumers may be entitled to and rules that need to be observed while in the port area.

-to draft the necessary contract including the terms and conditions for leasing and renting of allocated places and other equipment belonging to the port

- to organise and supervise the coastal trade shipping around the territorial waters including the EEZ

-to promote, develop and administer the free port area.

-to request, if need be, the technical, scientific and financial co-operation of other relevant organisation.

The General Port Management Company consists of an Executive Committee which scrutinises the operations documents and controls the ongoing activities in the port; they also meet annually to discuss the budget, new investment and renovation of port infrastructure.

The personnel of the port management company comprises of a Managing Director who has the overall duties of the port management. Under his jurisdiction there is a technical cabinet , a legal cabinet and a planning department. There are also eight other departments which consist of an administrative department, a direction for national trade and coastal vessel, a Department of Finance and a Department for maintenance of equipment. These departments are supposed to have continual communication and interlink in the execution of their duties.

2.3-The Vessel Traffic Management

The International Regulation for Preventing Collision at Sea plus the amendments of 1983 , 1989 has a special section which is classified as rule 10 where they advocates a traffic separation scheme for vessel traffic management especially in port areas. This regulation gives the country an excellent support to carry out effectively cargo handling at quay at the International Port of Port-au-Prince because it enables Haiti to avoid traffic congestion and collision between ships and also enables the regulation of the movement of pleasure crafts and fishing vessels.

Whether The Government of Haiti has ratified the Collision Regulation through the activities that are undertaken in the Port of Port-au-Prince call for stringent control of all shipping movements in order to facilitate rapid discharge and loading of cargo. If this is undertaken on effectively shipowners will find the International Port of Port-au-Prince attractive for transshipment of cargoes or onward forwarding of cargoes to ports where the ship draft does not permit them to sail.

2.4-Vessel Traffic Separation scheme

It is crystal-clear that there are always multi uses of a harbour area. as the law of the commons does not apply to interdisciplinary users of the sea. Where there is a port there will be an enormous amount of marine related activities.. It is not an elementary and simple matter to organise a vessel traffic separation scheme unless all the activities are monitored on a continuous basis. Looking at it vis a vis a financial aspect it would be very costly to set traffic movement of cruisers, cargo ships, pleasure craft, coastal vessels and fishing vessels. However, due to the International Convention on Regulation of Collision it is the writer utmost opinion that shipping movement has to be regulated in the International Port of Port-au-Prince.

As regard to the Vessel Traffic Service (VTS), a simple communication system is provided. A radio station using VHF-FM on channels 12, 14, 16 and additional ones and medium frequency AM works round the clock. Standard time in the country is that of the meridian of 75 degree West or 5 hours behind of Greenwich Mean Time.

In order to facilitate rapid movement, special authorisations can be granted to ships' masters who are used to the port to berth their ships or shift them from one berth to another without pilot.

The international Port of Port-au-Prince does not own quay be for serving military ships which own their own quay totally separate from the port of Port-au-Prince.

2.4.4-Fishing vessels.

There are no fishing vessels at the present moment vessels moving around the port of Port-au-Prince. However, there is the possibility that in the future berthing for commercial fishing vessels may be catered.

2.5-Background Information related to the services offered by the Port of Port-au-Prince

2.5.1-Nautical Access features

The International Port of Port-au-Prince is very well protected and almost always calm. It is situated at the extreme Southeast of Port-au-Prince, 18 degree 33 minutes North and 72 degree 21minutes West. The tidal variations fluctuate between 0,39 and 0,48. The currents in the port are negligible. The Port offers a large basin of

anchorage composed of sand and coral with a depth lying between 16 and 28m. Access to the port is by either of two channels of 5 leagues wide: the Canal de Saint-Marc and the Canal du Sud ou de la Gonave. each of those channels are 4 km long and 12 to 20 meters depth.

Generally the meteorological conditions are good as the bay is always calm. The rainy season is from March to June and September to December. It is to be noted that there are only 2 seasons in Haiti. The currents are very weak inside the Port-au-Prince Bay.

Table 1-Geographical position of anchorage buoys

Buoy A 18-33'-13.1"N	72-22'-43.1" W
Buoy B 18-33'-19"N	72-23'-07.7" W
Buoy C..18-33'-24.6"N	72-23'-31.5" W
Buoy D 18-33'-52.4"N	72-22'-57" W
Buoy F 18-34'-04.1"N	72-23'-45" W
Buoy H 18-34'-09.5"N	72-24'-09.2" W
Buoy J 18-34-'27" N	72-23-'23" W
Buoy K 18-34-'44" N	72-23-'57" W
Buoy L 18-34'-42" N	72-22'-45" W
Buoy Q 18-34'-16.4"N	72-22'-55" W

2.5.2-Pilotage features

The pilotage facilities belong to the National Port Authority which can decide regarding disciplinary and control matters related to the behaviour of pilots. The National Port Authority ensures also the respect of standards concerning the pilotage itself. In addition it provides all the equipment necessary and impose the tariffs of pilotage.

It is compulsory for all ships from 800 TJB calling the Port of Port-au-Prince to use the pilotage facilities offer by the port at the arrival and when leaving the port. The ships must inform the port about their estimating time of arrival through VHF channel 16 and 12 .

2.5.3--Towage features

The towage facilities are provided by private companies linked to the National Port Authority by mean of contract. Two tugs of 800 and 1100 hp service the port. Team of workers belonging to the National Port Authority provide without interruption their services to anchored ship, ships leaving the port or for any other move in the area of the port.

It is to be noticed that The facilities for towage and lamanage are far from being sufficient when we see the number and different types of ships calling the port as well as the tonnage of some of them, the number and the power of these tugs cannot respond to the demand.

Table 2-Type of ships calling the IPPAP : 1987-1998

Period	RoRo	LoLo	Mix	Roulier	Cargo	Tankers	Other	Total
87-88	180	118	126	46	77	49	110	710
88-89	211	72	137	57	65	58	105	705
89-90	147	109	123	41	62	63	100	645
90-91	190	79	140	36	86	59	91	681
91-92	68	38	63	9	69	24	69	335
92-93	81	25	222	6	192	26	94	646
93-94	55	8	81	2	58	26	230	300
94-95	239	82	232	29	112	32	204	930
95-96	76	110	329	20	159	34	184	912
96-97	27	100	299	23	168	15	163	821
97-98	39	65	319	27	166	20	192	824

Source:Registres Administratifs APN

2.5.4-Berth features

The jetty of the IPPAP has a length of 758 m on both sides. One of the 2 roll-on/roll-off platforms is available on the north side of the jetty. While the other is between 8 to 10 meters deep and the wharf can berth 7 ships with an average length of 120 meters.

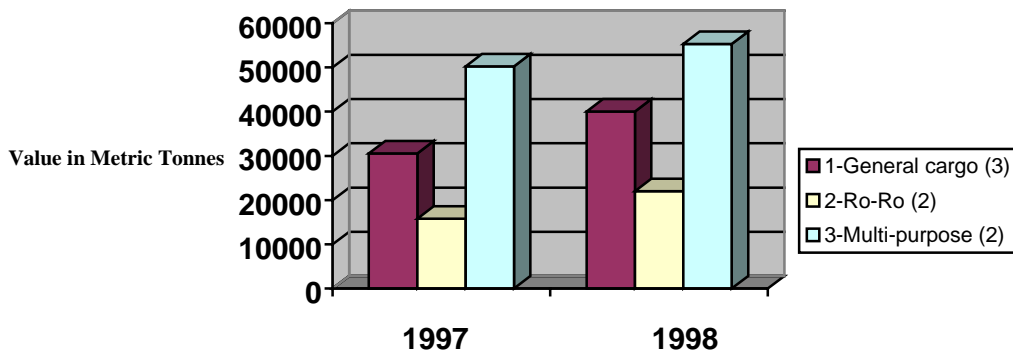
The port disposes of berthing facilities approximately 4 km from the boarding zone. The relatively new facilities comprise of the following:

- three general cargo berths
- two container berths
- two Ro-Ro berths
- two multi purpose berths

The throughput of the berths handling general cargo is shown in the next table:

Total throughput for the periods 96-97 and 97-98 in Metric tonnes

Berths	Number of ships		Total traffic	
	1997	1998	1997	1998
1-General cargo (3)	50	65	30512	40000
2-Ro-Ro (2)	28	35	15800	22000
3-Multi-purpose (2)	300	319	50200	55303
Total	378	419	96512	117303



Source: APN Statistics.

Figure1 Evolution of the troughput in metric tonnes 1996 to 1998.

Throughput of the container berths for the period 96-97and 97-98 in TEU

Berths	Nber of containers		Total traffic TEU	
	96-97	97-98	96-97	97-98
2	96-97	97-98	96-97	97-98
Total	52207	81750	110725	119873

Source: APN statistics

It is to be noticed that the performance of the general cargo berths is of 45 tonnes per ship per hour and of 14 movements per hour for handling a container vessel.

2.5.5-Handling features

The equipment available for handling containers, general cargo is between 15-20 years old. According to information updated in February 1998, the equipment may be broken down as follows:

Table 3-Handling equipment

	units	working	breakdown	out of order
Cranes	3	1	1	1
Cont.FLT	4	2	1	1
G.Cargo FLT	23	1	10	12
Shunting Trailer	15	8	5	2
Flatbed Trailers	11	11	0	0
Total	56	23	17	16

Source APN(DEEM)

Table 4-Composition of the handling equipment by categories

Description	Capacity	Year of purchase
1 Mobile Crane	150t	1977(out of use)
1 Rail-Mounted Crane	30t	1978
1 Struddle Carrier	33.6t	1981

Table 5-Container Forklift Trucks

Description	Capacity	Year of purchase
1FLT	24t	1977
2FLT	36,6t	1978 (out of use)
1 FLT's	35t	1986

Table 6-General Cargo FLT

Description	Capacity	Year of purchase
16 FLT's	3.5t	1977
5 FLT's	7t	1978
2 FLT's	9t	1980

Table 7-Shunting Trailers & Flatbeds Trailers

Description	Year of purchase
15 Shunting Trailers	Range 1980-90
11 Flatbeds Trailers	Range 1975

Source: APN(DEEM)

The equipment inventory shows that it is far from adequate because obsolete and can not respond successfully to the actual demand. A major reason for that is there is no equipment planning. As the lecturers Ircha and Crook have pointed out in their lectures of May 1999, it is vital to ensure that the port always has a level of equipment which can satisfy the operational requirements.

2.5.6-Storage Features

Storage facilities are a matter of concern for port managers especially when ports do not have enough land to expand their storage facilities. At the Port of Port-au-Prince the storage area occupies an area of 180,000m² shared as follow:

Table 8-Storage facilities

Description	Surface
2 transit sheds	17,920m ²
5 halls for general cargo	9,675m ²
Container yard	84,972m ²
Open air storage	10,060m ²
Covered storage	18,110m ²

source: APN (Annuaire 1997)

2.6-Conclusion

The review of the current situation at the IPPAP talks for itself. The organisation is a centralised one which does not permit the right decision to be taken in that sense that decisions concerning the important things that make a port efficient have to be approved by all the members of the board of direction. In Haiti political influences and centralised matters are the worse enemies of the public entities. Political adherence and acquaintance rather than competence are the main

requirements for managers to be appointed. The result is that such managers become powerless. These circumstances have caused the problems to persist or even to be worsened over time. Also the frequent change of managers has been to the detriment of the port because the tendency is that every new management staff tempts to implement their own policy .

It appears then that a big change in the mentality is the first requirement for Haitian Organisations to be able to respond to their duty. People should know that a port organisation has a commercial aspect which is predominant and consequently has to be managed in a way which can bring money mostly hard currencies which in the case of Haiti is very important for the equilibrium of the balance of payments because of its high amount of debts contracted vis-a-vis the World Bank, International Monetary Funds etc.

Chapter 3

3-Assessment of the International Port of Port-au-Prince

3.1.- The National Port Authority

The first port installations at Port-au-Prince were built in 1911. They comprised of a quay wall of 610m long with a jetty of 183m long and was 14,5m width . At this time a Haitian-American private company had made a lease for 50 years to manage the company. This ended in 1956 when the Port Administration of Port-au-Prince was created and placed under the supervision of the National Bank of the Republic of Haiti (BNRH).

By different decrees the status of the institution was modified gradually and on June 18, 1973 became an autonomous organisation . The Port Administration's role consisted of managing the International Port of Port-au-Prince and other ports in the country. Five years later, in 1978, a new appellation was given to the organisation: The Authorite Portuaire Nationale. On March15, 1985 a new decree gave the APN the mandate to run the Port of Port-au-Prince.

Actually the National Port Authority (NPA) has under its jurisdiction two international ports ,: the International Port of Port-au-prince , the International Port of Cap-Haitien, and 16 other coastal navigation ports.

As already indicated the National Port Authority is a state-owned organisation with commercial purposes. Its main aim is to provide all kinds of port services to ships, shipowners, shipbrokers and all other port's users.

The APN is endowed with an Administrative Advisory Committee of 5 members elected by the Central Government and a General Port management leads by a general manager who is elected also by the Government. The fact that APN meets all the requirements of a state owned company shows that the public sector plays a dominant role in the guidance and overall development of APN. It is typically controlled by a small elite who have an enormous influence against others decisions of the management port company leading to many problems in the management of the administration and the port's operations.

One problem in the management's organisation of APN is at the level of decision making for decision to be taken leads to lengthy discussions which most of the time are to the detriment of APN. Considering that the National Port Authority is theoretically a commercial organisation which has developmental objectives to meet, and also that realising these objectives depends on its ownership and its degree of legal and financial autonomy, one can conclude that the port authority cannot respond to its duties effectively.

3.1.2- Managerial assessment

At the managerial level the problem is that the general management is elected by the government and then depends entirely on the administrative advisory Committee for ratifying its all decisions that the port has to take for playing its role in the society like:

- generation of employment
- better distribution of the port wealth

- better economic and social cohesion into the region
- promotion of export
- and protection of the marine environment

Any organisation private or public is linked to the development of other sectors in the economy. These links may be seen through an input output analysis. Usually the stronger the links are the better the organisation succeed in designing effective public policy.

3.1.3- Promotion of exports

One of the most important roles of ports is to promote exports. Developing countries are dependent on industrialised nations in terms of:

- International trade, foreign investment and the activities of multi-national enterprises;
- International monetary arrangements, foreign aid and related activities;
- International consulting organisations
- Research and development activities associated with all above,

One of the means of coping with this dependency of developing country as Haiti is to promote exports which can bring foreign currencies. This is very important in terms of repayment of international loans and balancing the national debt. In this context it can be seen that the National Port Authority has a big role in promoting exports.

During the colonisation period Haiti was called ST-DOMINGUE and was one of the richest in all the colonies. and the greater part of its wealth came from her exports. This exports consisted of mainly sugar, coffee, cotton, indigo and precious wood. Since independence exports have dropped considerably. Now the Haitian exports account for only 10% of her GNP. For example in 1998, according to the

National bank of Haiti (BRH), Haitian exports were 180 million US dollars while its import reached 245 million of US dollars which meant that balance of trade registered a loss of 65 million US dollars.

One of the reasons for the dramatic drop in exports is the low price of sugar and coffee on the international market. Other than agricultural produce the Haitian Government should also promote the products assembled in Haiti by offering through the port of Port-au-Prince incentives in lowering prices at export. Unfortunately any of these measures have been taken. Consequently there is a significant decrease in foreign earnings decrease in total tonnage handled. The table following shows the big gap between import and export from and to different countries for the period September 1997 -October 1998:

Table 9-Tonnage of merchandise handled from and to the 5 continents for the period September 1997-October 98 from the Port of Port-au-Prince

Continents	Discharged	Loaded	Difference
Europe	89,126	7,440	81,685
Asia	94,870	71	94,798
Africa	-	-	-
America	1,640,265	46,902	1,593,363
Oceania	1,635	-	1,635
Total	1,825,897	54,415	1,769,846

From the foregoing figure, we can see that there is a big gap between the tonnage of merchandise handled at import and export. That means that the country is loosing money because the percentage of exports is very low and almost nothing is earned by the port as far as exports are concerned.. Of course this problem is not only dependent on the policy of the National Port Authority which can not fix tariff

regarding its own view. In fact the Board of Direction has the final word, but also because the government has a totally different way of seeing the problem. For instance, the government is unable to promote intensive cultivation of coffee and cacao because the few plantation's owners want to have the monopoly in order to keep their prices high.

In this context, the APN has no latitude because not only the percentage of exports are low but also the administration has no power on fixing prices although it is said a commercial organisation.

3.1.4-Human resources assessment

The increase of urban population has taken place in some developing countries such as Haiti largely because of the fast growing population movements from rural to urban areas, and over concentration of new employment opportunities in the cities.

The urban growth phenomena has created lethal combinations of interrelated and self-generating problems of enormous proportions., Problems of urban transport associated with the growth in vehicles are one integral component of the wider urban development situation of cities in developing countries.

The backcloth to these circumstances in most of these countries consists of:

- widespread unemployment
- a lack of skilled manpower especially at managerial levels
- occasional high rates of inflation (29,3 per cent per annum average for middle-income economies, compared with 8 per cent per annum for industrialised countries)
- high birth and death rates

- relatively low life expectancy (between 59 and 61 years) for low-income and middle-income, respectively, compared with an equivalent figure of 76 years for the industrialised countries
- high illiteracy levels, with an average 30 percent of the population's relevant age group attending school and 4 per cent attending further education in the low-income nations, as against comparable figures of 87 and 37 per cent in industrialised countries.(Dimitriou, 1990, p14).

It is understandable that the issue of employment is very important in Haiti. In the National Port Authority the issue of recruiting personnel is very complex one because in one hand the managing board has possibility to recruit personnel, while on the other hand the government can impose anyone to the Board of Administration and when we know that there is a big problem of unemployment in Haiti one can imagine the profile of a great number of employees of the National Port Authority. Usually this recruitment is by presenting resume, it is very common to see people without any educational background being employed prior to qualified persons.

The problem of qualified persons is a very big matter for this country which does not own a maritime school. It is not a secret that Haiti lacks expertise, especially in the port sector. It is not an easy task to find managers who can combine at the same time competence in the maritime field and other necessary qualities. It is a necessity not only for managers, but also for all those who are involved in port operations, to have knowledge in the field and a good idea of the changes taking place in shipping. Looking at the personnel, a different reality was noticed. According to the figures updated in September 1998, the port had 1688 employees and staff which is thought to be excessive, formerly there used to be a workforce of not more than 500 people .

Comparing the above to the ports of Malmö and Copenhagen, that are bigger in all respects, there were respectively in 1999, 300 and 600 employees and staff. Of the 1,688 people, 1,200 employees, that is 70 % had no qualifications for the work in the organisation nor did they have any specific tasks to perform. Hence, this excess in employees constitutes a heavy financial burden in salaries and more so if they do not have specific duties to perform.

Of the remaining 488 employees which represents 30%, only 2.6 per cent had been trained in a maritime field. Since there is no training school in the country as it has been pointed out earlier, they have been trained abroad, especially in the “Institut Portuaire et de Recherche (IPER) du Havre in France. and one, a former WMU graduate, Sir Julio Julien was appointed as the general manager of the National Port Authority in May 1997. It is to be noted that from 1983 to 1998, 7 people have graduated from World Maritime University. However, 4 of them have left the country, because of precariousness of employment and few incentives given to them, and at the present moment 3 are still working for the National Port Authority. In 1997, a survey conducted on a sample of 61 middle managers and deputies showed the following result. (Lazare, 1997, p28)

Table 10-Survey on Middle Managers’ training in 1997

People	High school	Higher education	Maritime training
12	12	12	12
30	30	30	-
19	19	-	-

Source: Murat Dissertation MSc 1997, WMU

From these figures it can be seen that only 12 people have taken part in courses or seminars related to port activities. The inadequacy of a human resource policy is seen in the recruitment process, promotion and retirement. Practically as

already indicated politics dictate the choice of employers and employees, which are not always in line with the port needs. There is no big effort to retrieve the rare competencies available. The worst cases involve often political power, pressure groups which inundate the port with people without any qualifications at all. Very often managers are completely disarmed and just accept the fact.

The same can be said about the promotion practices which usually do not reflect good policy which adds to the frustration of the management. A direct consequence to this is absenteeism which is not easy to remedy. As regards to salaries, the treatment is not better. The salary structure is always spoken of, but not standardised so that there was a disparity among employees of the same level. This has given rise to criticism by a number of employees. The tables following will give an overview of the distribution of the employees for a period of 10 years from 1988 to 1998, and by responsibility for the period October 1997-September 1998.

Evolution of the Personnel

Sept 88	Sept 89	Sept 90	Sept 91	Sept 92	Sept 93	Sept 94	Sept 95	Sept 96	Sept 97	Sept 98
581	715	876	769	1307	1296	1267	1446	1508	1651	1688

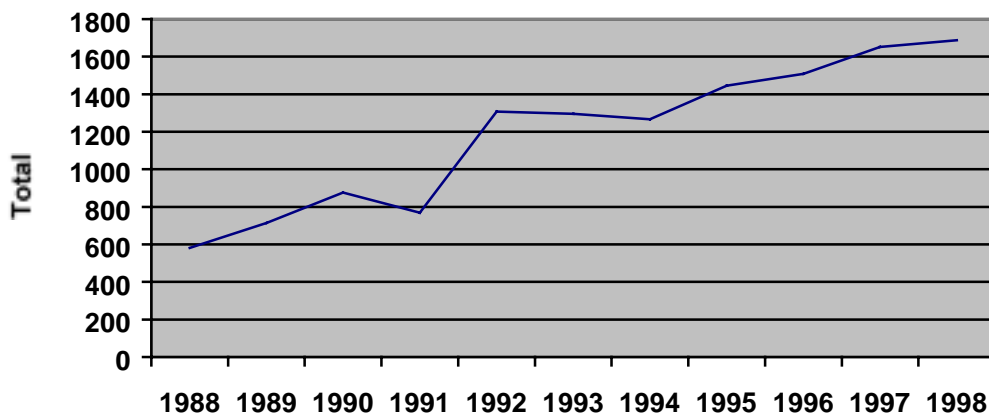
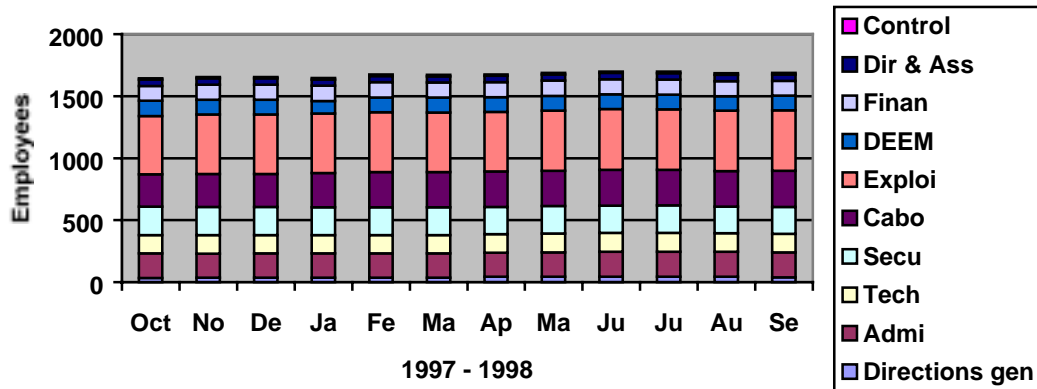


Figure 2 Evolution of the personnel regarding the traffic

**Table 11-Distribution of the employees by responsibility period
October 1997 September 1998**

97-98	Oct	No	De	Ja	Fe	Ma	Ap	Ma	Ju	Ju	Au	Se
Directions gen	33	35	36	37	37	37	43	43	43	43	43	40
Admi	198	195	195	194	195	195	195	197	202	202	201	200
Tech	149	149	149	149	148	148	148	152	152	153	151	150
Secu	228	227	226	225	225	223	221	221	221	221	215	217
Cabo	262	267	265	276	284	284	285	286	288	287	286	290
Exploi	470	478	480	480	481	482	482	485	489	488	486	489
DEEM	122	120	120	100	119	119	118	119	119	118	118	119
Finan	121	122	122	123	124	122	122	122	122	122	121	119
Dir & Ass	50	50	50	50	50	50	50	50	51	51	52	52
Control	12	12	12	12	12	12	12	12	12	12	12	12
Total	1645	1655	1655	1644	1675	1672	1670	1687	1699	1697	1685	1688



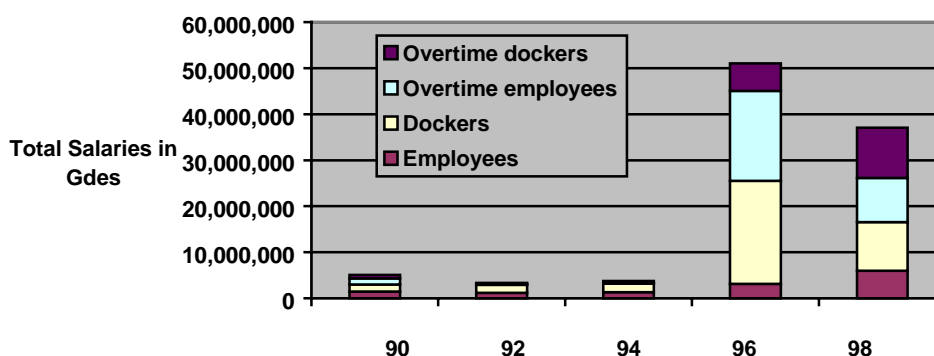
Source: APN registres administratifs

Figure 3. Distribution of employees by responsibility.

From the above table, it is clear why the salary heading is diminishing much of the revenue of the National Port Authority. Later in this paper it will be seen that the number of ships calling the port generating the throughput passing by do not justify at all this overload of employees working at the port.

Table 12-Evolution of salaries from 1990 to 1998 in Haitian Gourdes
(1 US dollar = 17 Haitian Gourdes)

	90	92	94	96	98
Employees	1,492,316	1,176,835	1,294,742	3,157,169	5,978,884
Dockers	1,509,621	1,718,888	1,886,623	22,324,836	10,584,092
Overtime employees	1,294,394	155,985	157448	19,549,254	9,559,262
Overtime dockers	762,893	281,695	443,768	5,986,932	10,956,263
Total	5,059,224	3,333,403	3,782,581	51,018,191	37,078,501



Source: APN Financial report

Figure 4. Evolution of salaries employees versus dockers.

3.2- Assessment of the performance of the port

Port performance indicators is a necessary tool for port management, for the continuous evaluation of future capacity requirements and for an optimal allocation of the existing resources in daily operation.

A single and effective measure of port productivity which can be used for global comparison is more or less impossible to calculate (complexity of numerous

cargo handling operations, the highly variable resource input and the degree of technology.

Therefore a set of port performance indicators must be developed which enables port management to monitor operational efficiency. Such indicators would measure the annual berth throughput in tons handled per metre of quay; tons handled per gang- hour; tons handled per gang/shift which is the quality of services to cargo moving across a berth at a given time; and berth occupancy as a measure of the proportion of time a berth is occupied per year. The latest is usually influenced by the speed of ship - shore operations, design of ships and equipment aboard for discharging, and comprehensive cargo information, well in advance.

The performance indicators can be separated into two main groups, on the one hand the physical performance indicators and on the other hand the financial indicators.

3.2.1-Berth occupancy

The term “ berth occupancy” covers the period of time during which a vessel actually occupies a berth from actual arrival at the berth to actual departure. It is a very important indicator as it describes the utilisation of the berth capacity and therefore influences decision making for investments in new berths, which can be considered as the highest financial burden for a port in general. To calculate the berth occupancy ratio the number of hours of occupancy have to be multiplied per 100 and the result divided by 24 hours times the number of berths. As an example, if a port has been occupied during 200 hours and the number of berths available is 12 ,then the occupancy ratio will be:

$$200 * 100 / 24 * 12 = 69\% \text{ berth occupancy/day}$$

In 1997 and 1998, the berth occupancy ratio at the National Port Authority was 81 % and 91 % respectively. It has been calculated from the service time which comprises a non-operational time and an operational time. The operational time is limited by the availability of equipment at the International Port of Port-au-Prince. This availability of equipment and its utilisation appear to be the major factors determining congestion at this port.

Too often port operations equipment is not available when needed or is subject to frequent breakdown during operations. This scarcity of equipment provokes and maintains intolerable ship delay and high berth occupancy. For instance when two or more container ships arrive at berth within a short period of time, only one will be served by the only crane which exists, while the next waits until this unit is available after completing the cargo discharge operation. (It is to be noticed that this crane is 30 years old.). Ship operations may take more or less time depending on the carrier. Often crane operators, stevedores gangs and drivers are required to work overtime in order to reduce ship turn around time.

Usually the International Port of Port-au-Prince works two shifts. If the work is carried at full time capacity the intrinsic capacity of the port could be better.

The difference between the intrinsic capacity and the actual performance in the berth occupancy represents the slack caused by both avoidable and unavoidable delays which might be summed up as:

- late attendance of pilots or any breakage of the vessel;
- late arrival of the vessel
- shortage of labour

- lack of equipment
- late start of work
- bad timekeepers
- weather conditions
- unbalanced arrivals of vessels provoking queuing or few vessels to occupy vacant berths

these unforeseen circumstances do not allow for a stable berth occupancy indicator.

3.2.2- The berth throughput

The essential function of a port is to facilitate two-way cargo flows between land transport systems and sea transport systems. This function is appraised by measuring port throughput which reflects the combined effect of the various factors influencing port operations.

The proper analysis of the throughput depends upon the data available. Total throughput is obtained by considering the throughput for each berth during established periods.

The berth throughput in the International Port of Port-au-Prince is difficult to be estimated because of the unreliability of available data. Berthing at the Port of Port-au-Prince is carried out prior to containerships. A special case in allocating a vessel to a berth rather than another one is when the allocated vessel has to shift to complete her discharging and loading operations because her draft become smaller, to leave vacant the former berth for ships with deeper draft. Besides that, the fact that there is only one crane of 30- years- old available in the port does not ease also the estimation and geared ships have not the same discharging and loading rate than when they are operated with quay cranes.

The tonnage handled in the International Port of Port-au-Prince are as follows for the last 10 years.

Figure 5.Total throughput containerised cargo 1988 to 1998.

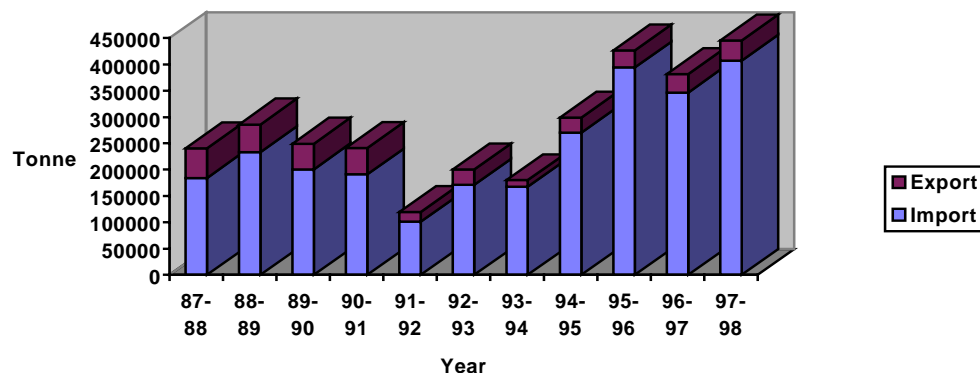


Table 13. Tonnage handled in the International Port of Port-au-Prince during the past 10 years containerised and general cargo

Year	Import	Export	Total
87-88	184343	56086	240429
88-89	233305	52239	285544
89-90	200845	48437	249282
90-91	190868	50129	240997
91-92	100964	18626	119590
92-93	171172	29408	200580
93-94	167473	12674	180147
94-95	270407	28363	298770
95-96	394187	32248	426435
96-97	346667	34993	381660
97-98	407145	38038	445183

source:Statistics(APN)

Figure 6. Total throughput general cargo 1988 to 1998.

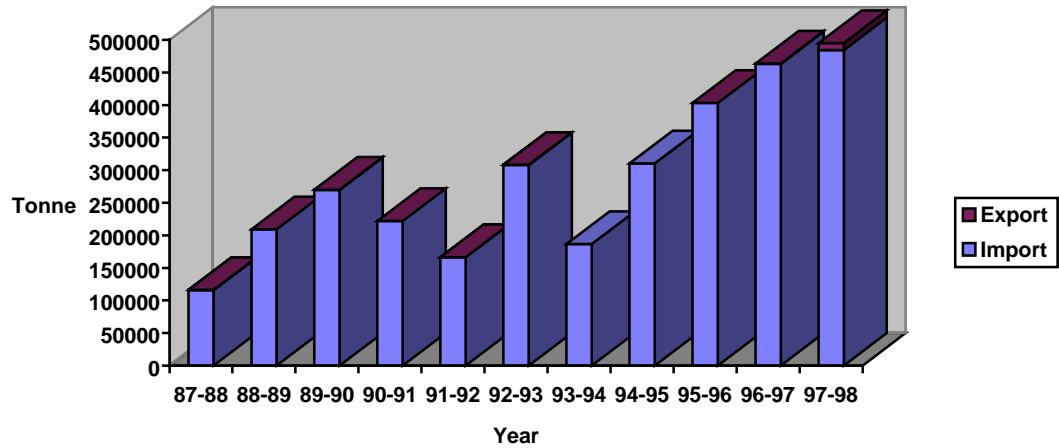


Table 14- Total throughput general cargo 1988 to 1998

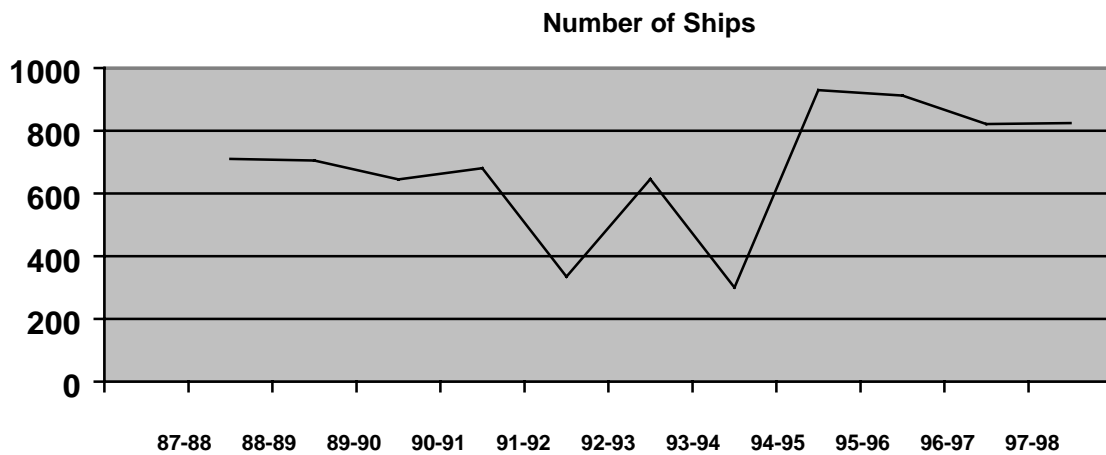
Year	Import	Export	Total
87-88	115898	288	116186
88-89	209127	123	209250
89-90	269642	384	270026
90-91	222002	21	222003
91-92	166448	4	166452
92-93	307915	306	308221
93-94	186517		186517
94-95	310347		310347
95-96	403069	310	403379
96-97	463081	654	463735
97-98	484303	10859	495162

Source: Statistics (APN)

Table 15- Total traffic for the past 10 years and average growth in number of ships calling and in the total throughput

Years	Nber of ships	total throughput	average ships increase or decrease	average throughput increase or decrease
87-88	710	958,317		
88-89	705	1,096,040	0.7%	14.37%
89-90	645	995,828	-8.5%	-9.14%
90-91	681	987,225	5.58%	-0.9%
91-92	335	583,273	-51%	-41%
92-93	646	897,126	92.8%	54%
93-94	300	511,932	-54%	-43%
94-95	930	1,285,133	210%	151%
95-96	912	1,679,838	-1.9%	30.7%
96-97	821	1,766,713	-10%	5.17%
97-98	824	1,874,795	0.3%	6%

Figure 7. Average growth in number of ships calling the port 1988 to 1998.



Source: Statistics (APN)

From the tables shown above it can be seen that the total throughput for general cargo is bigger than the total throughput for containerised cargo. This can be

explained by the fact that the National Port Authority of Haiti owns only 1 gantry crane which can only handle 15 tons per hour. From a recent survey led by the statistics department of APN, it has been recognised that this crane does not operate everyday. These tables also show that the total traffic generated at the Port of Port-au-Prince and the number of ships calling the port follow a very fluctuated shape. This is due to the fact that the country has been the theatre of a lot of military push since 1986. The number of ships calling the port have also diminished due to a great extent that any improvement in the facilities offered by the International Port of Port-au-Prince has carried out. The Port of Port-au-Prince is a state-owned company and as such the benefits generated by its activities instead of being employed to offer modern services to ships, are claimed by the government to strengthen its political position.

3.3-The ship turn-around time

The ship's turn-around time in a port is the most important factor as it influences the shipowner or ship operator choice to call at one port or not. As the operational costs of a ship per day is very high, and is thus under time pressure, her turn-around time in any port must be taken into consideration to help owners or operators to cover their operational costs. A ship's turn-around time at port is carefully looked into by the shipping lines and their representatives in order to calculate a port's efficiency and the sailing schedules for their vessels.

A ship turn-around time is directly related to berth occupancy and berth throughput and includes the following components:

- the actual time of operation

-the waiting time of a ship in the port, this would cover. periods of non-operation due to equipment breakdown, non-availability of cargo and /or labour, shift-breaks, opening/closing of hatches, storms, rain etc.

-Manoeuvring and clearance-time prior to and after operation, such as towage, mooring , customs clearance, immigration etc. are also contributing factors.

Table 16. An example of ship’s time at the IPPAP and an average volume of cargo loaded and discharged during this time in tonnes

Type of ships	Nber of ships	Average nber of days	Average weight of cargo loaded and discharged
Cargo ships	15	7	1500
Container	5	3	2000
Ro-Ro	8	5,502	1500

Source: APN harbour master

3.3.1- The waiting time

The waiting time of ships at the International Port of Port-au-Prince because usually ships wait usually long before being allocated a berth. To demonstrate the relation between the arrival time and the waiting time a sample of 120 days on a basis of 10 consecutive days per month has been chosen. A survey was made of a total of 296 and 280 vessels of all types. They were counted respectively for each year for the number of the above mentioned days. The two tables thereafter show the results as follows.:

Table 17-Average Waiting time in 1998

	Jan	Feb	Mar	Apr	May	Jun	Jul	Au	Sep	Oct	Nov
Ship	25	21	19	26	29	29	32	19	23	18	24
DI	9.3	9.6	13.0	8.8	8.0	7.2	10	9.3	13.0	8.6	8.3
Average Wq*			Average Ts*			Total time			Waiting ratio		
19 hours			91 hours			110 hours			20%		

Source: Lazare MSc Dissertation 97, WMU

DI= daily intervals

Ts= service time

To summarise the above table, for the year 1998, the daily average 10.2 hours roughly meaning that each 10 hours a ship called at the port. Then for a day of 24 hours, only 2.35 ships called.

Usually one of the main causes of such a long waiting time at port is that changes taking place in shipping industry have a direct impact on ports which are forced to respond quickly to those changes if they want to remain competitive. The port of Port-au-Prince for not taking seriously this reality into consideration, has failed to fulfil its responsibilities. As professor Mancion has pointed out (November 1998, lecture), ports are responsible for the waiting time related to traffic congestion, non availability of berth and obsolete regulations.

From the table above showing the average waiting time in 1998, it can be seen that congestion accounts for a small part in the total waiting time remembering that only 2.35 ships called the port in a day in 1998. It is more an artificial congestion created by inadequate facilities coupled with mismanagement of the existing ones. The pattern of ship arrivals and arrivals distribution witnesses this fact. The same could be said as well for the berth allocation. Regarding obsolete regulations, the port is quite affected in terms of waiting. In a broader perspective, it is more appropriate to speak about institutional problems instead. They are concerned mainly

with the port not having enough autonomy, not setting up objectives and priorities and this in turn results to poor planning and an inappropriate equipment policy.

3.3.2- The ship operations

This sequence deals with the movement of cargo between the quay side and the vessel. It comprises the preparation of cargo for the lift, the derrick or the crane operations, and the release and disposal of the cargo after the lift.

At the IPPAP, before the ship is berthed the necessary gangs and the operation methods are determined according to the services to be provided by the ship-side gangs and the quay-side gangs of the respective sheds. These decisions result from the operations manager onboard the ship and the operations manager on the quay. The necessary cargo transfer equipment as well as the allocated manpower (for the ship's gear drivers, stevedores onboard and on the quay, the transfer equipment drivers) are also determined.

On the ship the crew onboard as soon as the berthing takes place prepare her by putting everything ready for the loading and discharging operations. The time spent for preparation depends on the rapidity of both the stevedores (if they have to intervene in the preparation of the ship, e.g. unlash deck cargo) and the crew onboard.

3.3.3- The quay transfer operations

Identified to the moving of indirect routed cargo between the quay apron and storage areas, this operation involves a wide range of equipment that is in turn subject to continually varying demand. Although ship operations are carried out at a low pace because of the aforesaid reasons, the transfer operation faces some

difficulties in keeping in step with them. Many reasons may explain the delays and interruptions observed within the transfer activities leading to starvation and congestion on the quashed. However, regular visits during operation periods and surveys conducted within the operation department have allowed for claiming that in the search of a solution, priority must be given to the supply of equipment. In fact too many men are allocated, as a consequence of low availability of equipment in order to try to solve this problem. As a result the output of the transfer operation evidences a low figure while the limited height of cargo stacking reduces considerably the storage capacity, adding on delay and interruptions when storage area becomes congested..

This is why, this expected low productivity brings about the need for change if the port is to survive. Moreover, this situation not only reduces productivity of the port, but also increases ship's time at berth (increasing substantially maritime costs) and directly puts up the cost per ton of cargo handled.

3.3.3- Structure of cargo handling costs

The International Port of Port-au-Prince has the reputation to be the more expensive in the area. Excessive costs are a direct consequence of a poor management, lack of communication between the different port entity concerned and a poor equipment programme. It is the duty of the port Authority to minimise the operating costs incurred by all concerned, the port, the vessels and the cargo interests. Its basic aim is to make the best possible use of existing facilities. Providing better operating conditions reveals a well known method of achieving goals as such as increasing capacity of existing facilities and low costs. At the same time the port management has to be improved. Conversely low productivity resulting from supply matters described earlier causes handling costs to increase overtime and other induced costs. Furthermore, time is a major factor with respect to costs of a vessel's

staying at the port. For vessels, each extra day spent in the port due to waiting or to a slow dispatch means a loss of thousands of dollars on fixed expenses only.

In cargo handling, additional time induced by failure of equipment results in higher labour costs and low turnaround of cargo on berth. As discussed above, the way that transfer operations are conducted clearly signifies that the demand for handling equipment exceeds the supply because of shortage in overall units as well as an excessive percentage of units out of order awaiting repairs or spares parts. Performed in conditions where low productivity is the norm, these operations address high costs to be covered by the cargo being handled. In fact, the costs of operating equipment consist of fixed and variable costs. Fixed cost are those incurred whether the machines are used or not, and made up by the annual investment costs, preventive maintenance and operators' wages as the latter are permanently employed. On the other hand, variable costs are mainly energy costs damage and repair costs.

Whatsoever the cost of ship awaiting is normally passed on as higher freight rates for trade using the port. A congestion surcharge is usually imposed in the case of liner shipping while the charter party makes provision for demurrage. In either case, the extra charges incurred by the carrier will be passed on as higher freight rates causing a rise in import and export prices of all cargoes passing through the port.

As said earlier the International Port of Port-au-Prince is particularly a good illustration of a port said to be very expensive. Port tariffs are fixed as the following US \$310 per TEU for discharge and US\$125 per TEU for loading containers, whereas general cargo is handled at an average charge of US\$6 per ton. One can easily notice that port tariff levels act against containerisation and thereby cargo traffic. This remark can be confirmed by assuming an average of 15 tonnes of general cargo per TEU. Accordingly, cost would become approximately US\$ 90 per TEU. As

such, these tariffs necessitate a revision so as to be in line with the general trend towards containerisation.

It is generally seen nowadays that port should operate as any private enterprise and therefore be financially viable by itself. Profit then is necessary so that the port must set as objective the minimisation of costs.

3.4- Conclusion

Considering the services offered by the APN as well as the operations of loading, discharging and storing of cargo it can be understood that the performance is very poor :

- too long waiting time
- lack and obsolete handling equipment
- excessive turnaround time regarding the number of ship calling a day
- excessive bureaucracy

This leads to the conclusion that definitely the port needs a drastic change. It is where that port's reforms should be scrutinised seriously. There are many ways to conduct reforms in any kind of state-owned companies including companies belonging to the port sector. The writer will attempt to review the different types of reforms which could be applied to the IPPAP and suggest an alternative which can fit her port.

Chapter 4

4.1-Different alternatives for reforms in port sector

4.1.1-Reasons for reforms

4.1.1.1-The global environment

During the Last decade, there has been a world-wide trend of institutional restructuring of the public sector. In some developed and developing countries, it has taken the form of commercialisation or privatisation of public enterprises. For instance in the former USSR and the former socialist countries of Eastern Europe and Asia,. steps have been taken to transform their centrally planned economies into market economies. Globalisation of manufacturing and national and international competition have been major motors for these changes. Market forces are increasingly being allowed to drive the entire national economy, which often involves institutional changes, away from public enterprise in centralised economies.

It is in this environment that port institutional reform is taking place. In many developed countries and most developing countries, ports are, in one form or another, public-sector entities. Some countries consider ports as a service sector for the general national economy. Some people think that Ports are so vital and strategic to countries that they should come under direct public control. Some countries see no other alternative than public-sector involvement since large investments are required

for port development. The public nature of the port sector, together with the serious problems in some countries, makes the port sector a target for institutional reform.

Considering the important place of ports in the national economy, they should contribute in minimising costs between the production site and the consumers. For doing this the ports should have the ability to adjust to ship size, to reduce the ships' turnaround time, to offer handling equipment for the different type of ships existing and cargo, and carry out the handling operations in a way to optimising the use of their facilities and reduce costs for the ships being served.

4.1.1.2-Reasons for changes

All over the world, basic port activities can seem identical, namely loading and discharging, receiving and delivering cargo, storage, services for ships etc. However, when comparing the performance of various ports, differences are seen between ports, even within the same region. For example, in Western European ports, the average productivity for container handling in 1998 ranged from 14 to 30 moves per hour per crane. In an Asian port in 1992, 458 containers were handled in 3.1/4 hours (Port view, *Port of Singapore Authority* review, January 1998) and the vessel stayed at berth for less than half a day, while in another port in the region, the same number of containers required a vessel to spend two to three days in the port. The difference in labour productivity between ports can also be considerable. In major port in the Far East in 1997, 7,200 employees were needed to handle about 200 million tons of cargo, while in another port of a developing country in the same region, 52,000 employees were needed to handle about 150 million tons of cargo. Low productivity and inefficiency have made some ports very expensive for their clients. This is the case of the Port of Port-au-Prince.

Many developing countries want to expand their exports in order to generate foreign currencies and develop their economies. Trade promotion has then been adopted as a national economy policy. Poor port performance can no longer be tolerated and governments have realised that the poor services and high costs of their ports are hampering their trade development and national economy. The proportion of port charges in the final delivered cost of traded products varies from 0.2 per cent for cargo of high value to more than 20 per cent for that of low value. As exports of developing countries are often of low unit value, port performance is more important for them than for developed countries. Although more developing countries are entering the world market with manufactured goods, they have often been providing low value-added products and products that compete on price rather than quality.

4.2- Objectives of port reform

Restructuring is the dominant issue in the port industry today. The driving force of this phenomenon can vary from country to country but the main objective is to make the port in tune with the market requirements and to review its position regarding its global environment . Effectively, this environment is rapidly changing and permanently bringing up more complicated market situations, new technology, frequent shifts of customer preferences, more intensive capital investment to keep pace with the competitors (Ircha, 1999). Therefore, port restructuring is not an isolated process which is done for the sake of change. It should be the reflect of the circumstances surrounding the port itself and the port objectives and options with respect to this changing and dynamic environment.

Restructuring requires then a thorough analysis of the local, regional and international market environment in which the port operates and obviously the particular problems that the port is facing internally and externally regarding the structural, financial and operational patterns. The choice of suitable restructuring

method and strategy depends largely upon the result of such analysis in order to avoid as much as possible any regrettable error in the decision making process.

The general objective of port restructuring is to make port management market oriented and thus enable to satisfy its clients' needs, subject to meeting its financial objectives, (UNCTAD, 1995). This objective may seem to be abstract, but it is important for the success of any port reform. The notion of the market is extremely important in the analysis as well as in the restructuring process. All over the world there are both successful and unsuccessful ports with various kinds of structure and management style: the port can be big or small, landlord or operating, public or private. However, successful ports have one thing in common, they all are highly market-oriented, while unsuccessful ports are not.

Efficiency is a too narrow concept to be considered as a general objective of port restructuring. A port can provide efficient services that clients do not need, and not provide those they do need. While cost-effectiveness is a measure of efficiency, there are other services that the market requires. Awareness of actual and potential market possibilities and requirements, flexibility, responsiveness, reliability, friendliness to mention only a few, are nowadays important requirements of the market, but are not necessarily reflected in the concept of efficiency.

Other more specific objectives are indispensable for developing a strategy and implementing a project. However, none should substitute, override or undermine the basic objective of responsiveness to the market. For privatisation, in many cases, to secure financing is an objective of port institutional reform. The government and the port authority lack the financial resources for new port projects and try to attract private capital. However, if this is the general objective, their attempt will probably fail. If the port sector is not financially viable under the public sector, the private sector is unlikely to invest. To involve the private sector, other market-oriented

changes need to be implemented. If the state-owned ports are not profitable, it may not be possible to privatise them unless and until action has been taken to remove the causes of their losses and then to make them profitable. Thus, it may be necessary first to deregulate and commercialise ports, regardless of whether they are subsequently privatised. If ports are profitable over long term, it is not because they have been privatised, but because they have satisfied the market. In other words, ports cannot make money for their development often because they have failed to adapt their organisation and management to the market's requirements.

The specific objectives of port restructuring vary greatly. The most important is to enhance the efficiency of port services. Some ports called for institutional reform, such as deregulation or privatisation, or diversify services or reduce costs. Financial sustainability has been a specific objective for many ports, either to alleviate the government's financial burden for the ports that are losing money, or to obtain new financial sources for development projects that the governments find difficult to finance. The following are some specific objectives for port institutional reform.

- to enhance the efficiency of port services;
- to diversify port services and promote competition;
- to reduce the costs of port services;
- to promote the port in the market;
- to facilitate organisational streamlining;
- to acquire management expertise;
- to find new financial resources for development;
- to strengthen entrepreneurial and managerial capacity;
- to ease the introduction of modern management methods;
- to solve/improve labour problems;
- to relieve the government's financial and administrative burden;

-to eliminate/minimise bureaucratic/political influence;

All these specific objectives are directly linked with the general objective to enable the port to satisfy the needs of the market and the clients, and they are all economic objectives. In addition, there are some other objectives set by the government's political policy. Some countries in transition from former centrally planned economies to market economies, for instance, have adopted a policy of developing the sector as the engine of growth and have made privatisation the end objective. Other countries focus on the internationalisation of public firms even if they are already market-oriented. In ports, there are particular objectives for privatisation programmes. For instance, the Government of Singapore announced in 1992 that the Port of Singapore Authority (PSA) was to be privatised. (The Journal of Commerce, 1992, page 23). Although the PSA is a public entity, the decision was not based on improving market orientation or efficiency of port management, as PSA has been client oriented port and is one of the most efficient ports in the world. The government's objective was to promote the growth of the country's capital market and to broaden and democratise the ownership of the port along with other large national enterprises.

The present situation of the IPPAP shows many problems related to the management and the port operations systems. We think that the IPPAP needs to be run differently. Experience has demonstrated in others countries that changed from a port runs by public sector to private that means privatise it has most of the time been successful.

There are many reasons for privatisation of state owned companies. It depends mainly of the situations of those companies and priorities of the governments. In first place usually the fact that governments want to promote economic or financial efficiency. For developing countries there is another major

objective, which is to modernising and internationalising the economy. Such achievement implies changing the roles of the state and the private sector (Gamba, Ana ,1994).

Behind these general objectives , there are more specific targets which can be as followed. Some countries will be given as examples:

a)- Desire to raise cash flow by selling state assets. In Brazil for example this is the main reason given by the Brazilian authorities for privatisation.

b)- Reduction of external debt is another reason for privatisation. This is the primary reason in several African countries where often large amounts of subsidies have to be paid to public enterprises which loose a lot of money.

c)- The participation of the private sector in a more active way in the economy is also an incentive for privatising public enterprises. It is recognised that the private sector is more dynamic than the public one.

d)-There are many approaches which under the right circumstances can be successful in privatising a port. The activity commonly labelled “privatisation” actually encompasses a broad range of options, each with varying levels of public and private sector participation and control.

4.3- Various methods of reform and their interrelation

There are now numerous approaches, which will under the right circumstances be successful in privatising. The approach chosen would reflect the policy and legal setting and the unique characteristics of the particular opportunity on offer.

4.3.1- Management modernisation

Some managerial improvements measures have to be taken in ports embarked in institutional reforms. By this modern management techniques would be introduced which have two advantages. First even if there is no institutional restructuring creating social changes, managerial measures can still have positive results on port performance. For example, in the port of Casablanca, operations were streamlined by setting clear objectives for each department and working team, and a new statistical system provided port managers with the means to have more efficient control. The second advantage is that these techniques form a basis for further institutional reforms. It is difficult to improve port services using institutional methods when basic management systems have not been adequately developed and modernised.

Experience has shown that most modern management methods used in other sectors, such as the manufacturing sector, are applicable in ports as well. For example, management by objectives, cost control, quality control and rationalised organisational structure, has proved to be an effective means to improve port management. In the UNCTAD study where the Principles of modern port management and organisation were discussed, one principle is to take decisions at the level where problems arise. This often implies the need for decentralisation, which is particularly important in the analyses of institutional reforms.

The difficulties connected with the quality of port decision-making are often due to the great distance between the place where the problem arises and the place the problem is solved. When the general objective is to satisfy port clients, the reason for decentralisation is evident. If those who are in direct contact with clients cannot take decisions, that principle will not be realised. Administrators from centralized public port systems rarely take decisions without the consent of officials at the

ministerial level, and they often have a relaxed attitude regarding commercial matters. In UNCTAD's case studies of four ports in Africa, it was found that the good intentions to improve port performance, in most cases experienced implementation problems were overladen with subsequent controls. The impacts of these controls has varied from minor management inconveniences to serious delays in decision-making. An unwillingness in the middle ranks of central government to delegate authority to the port organisation has been one of the major reasons for the problem, and in order to overcome it , a strong commitment at a higher level in government is required.

One method of implementing managerial improvements is performance agreements. These are agreements between the government and the port authority where performance expectations, functions, responsibilities and rewards of all parties concerned are specified. Obviously, performance expectations are related to market needs. Responsibility is transferred to the port and their results measured to determine the rewards.

4.3.2-Deregulation

It is essential to establish a mechanism of effective control that not only provides freedom for managers, but also creates incentives and motivation in order to avoid deregulation. There are a number of ways to achieve this depending on the nature of the organisation. For an economic and commercial organisation, such as a port, whose general objective is to satisfy market needs, the most effective way is to use market forces. Ports are operating more and more in a competitive market where decisions taken by owners and managers lead to full and often quick market reactions. The principle of market discipline is that managers who take good decisions are rewarded by more business and profits while those who do not take any decisions or take bad decisions, are punished by financial losses and even

bankruptcy. This market-related incentive is strong enough to make a port efficient. However, this market discipline functions only when there is competition.

Deregulation is a method that restores competition to a market that is distorted by excessive regulations. Deregulation does not mean total elimination of government regulations, but only those related to competition. Deregulation may relate to inter-port competition for cargo, port charges, port labour and investment in ports and port facilities. For example, in the United Kingdom, under the regulatory framework of the 1964 Harbours Act, only limited port investments could be made without the Government's permission, until the restrictions were eliminated in 1985. It is beneficial to a country to remove the regulations that restrict, limit and prohibit competition by controlling entry, exit, prices, etc., and often lead to non-commercial operations. However, regulations should be reinforced where a natural monopoly exists which is difficult to break.

As a national port policy aims at long-term benefits for the country as a whole, the government should encourage inter-port competition at national or international levels. In any case, before taking a decision to restrict inter-port competition for economies of scale, research and comparative studies should be done to measure the overall and long-term gains and losses for the country's economy when there is competition, as compared to the results when there are restrictions.

Deregulation is only an act of removal and does not imply modification, and even less, creation. Deregulation is also considered as a process of liberalisation of the management of enterprises and of the whole economic system from bureaucratic regulations. This generally brings satisfactory results, as long as the market mechanism worked and the general interests of the society are not at stake. Nevertheless, safeguards may be needed to prevent ports or port operators from misusing their monopoly position in relation to port charges. For example, in the

United Kingdom during the deregulation phase of the 1980s, the right to appeal certain port charges was widened. But it is unwise to use another's experience without assessing the characteristics of one's own environment.

4.3.3-Commercialisation

Ports may not meet market requirements because market-oriented economic objectives are not their principal goals. In some countries, ports are expected to pursue micro-economic market objectives, but in others macro-economic objectives are more important. Thus the port's contribution to the economy or employment may be more important than financial viability. Some countries subsidise infrastructure while operations are carried out on a commercial basis. Therefore, requiring ports to follow economic objectives and adapting the port organisation and management to be in line with commercial requirements and market needs is a way to solve the problem. This process is called commercialisation and has led to valuable experiences for some countries' port sectors.

Commercialisation has been a satisfactory alternative in a number of developing countries as well. In 1984, Morocco implemented a port policy which consisted, on the one hand, of entrusting the port authorities with tasks that fell within the administrative sphere; and, on the other hand, of establishing a public sector agency, Office d'Exploitation des Ports (ODEP) to carry out tasks in the commercial sphere. ODEP, set up in 1985, is, in fact a public enterprise functioning on an "industrial and commercial basis". Management authority was decentralised from the ministry, market-oriented objectives were established and effective control mechanisms were created. After the port commercialisation reform, significant improvements occurred in Moroccan ports. Since 1989, cargo handling has increased by 50 per cent in all sectors. In Casablanca, the country's major port, productivity improved 150 per cent in 1993. Vessel waiting time has been reduced to almost zero

in all ports. The image of Moroccan ports among their clients has now completely changed. Due to their achievements, the Moroccan Government also transferred the operation of several fishing ports to ODEP in 1991.

Port commercialisation works because it allows the port to fix its objective on market needs and client satisfaction. The most difficult part of it is not introducing changes successfully, but maintaining motivation and dynamism (UNCTAD, page 25). In commercialising port “private-type” management tool is applied that means implementing a series of modern port-management tools, such as cost control, financial audits, rigorous personnel policy and performance monitoring.

Sometime it is difficult to commercialise ports when the public sector is in charge of operation and management. Some ports were unable to implement the commercialisation programme and in other ports, the benefits of commercialisation did not last. The reasons are complex. Some people think that a port can eliminate its bureaucracy and become totally market-oriented by involving the private sector in its management. One reason that the public sector often fails to serve the market well is the fact that it is not faced with bankruptcy because it has government support and so is less sensitive to market penalties. Consequently, the commercial discipline and market force work best with managers whose success is determined exclusively by their performance. Almost all port managers in the private sector are in such a position, but only few in the public sector. this is the main reason that the private sector is more likely than the public sector to be efficient and why an increasing number of governments are turning to the private sector.

4.3.4- Privatisation

The approaches previously analysed as ways that the public ports can be run seek to make the ports more responsive to the market without changing the public nature of the port management with managers and employees working for public companies. Privatisation means gradually transferring the management, development or ownership of basic port functions or assets to the private sector. Privatisation involves private companies and private capital. It redefines the port authority's role by disengaging the public sector from activities which are best done by the private sector. Port privatisation is foremost a political decision, although it has to be carried out as an economic exercise. It depends on government policy rather than on the wishes of port managers.

Privatisation is a broad concept that embraces a large variety of practices from a simple lease contract to a private company to complete sell-off of port assets and capital to the private sector. Privatisation can also be undertaken through management contracts with an individual or a private or semi-public organisation. An investigation by the UNCTAD secretariat in 1993e found that there were at least 31 countries in the process of port privatisation in one form or another. As regard the degree of private participation, port privatisation can be divided into two categories : privatisation with the public sector playing a continuing role; and privatisation without public involvement.

4.4- Conclusion

Conditions for reform measures: the case of the of the Port of Port-au-Prince

Different implementation measures have different levels of difficulty. In fact, not all ports prefer the easiest way to embark on their port reforms. Some ports start with commercialisation, while others, realising that radical changes are needed, may start with privatisation. However the choice of measures is limited (Zietlow,G.

Deregulation and Privatisation in the Transport Sector March 1995). Specific conditions are required for each measure to be implemented effectively. While there are countries where port reform has been very successful, there are also less successful examples. Most failures occur because conditions were not right when the changes were introduced.

At the IPPAP we think that the conditions are right now for reforms to be introduced. In fact whatever the port reform approach chosen to be implemented, no special political or social conditions are required for its achievement.

Concerning the managerial approach at the IPPAP, education and training are important factors to achieve. Also a strong management team and good internal communication for consensus building are essential. Steps must be introduced to identify tasks with the staff, to give them more autonomy and authority and make them accountable for their activities.

Considering the commercialisation approach The Port Authority organisation should be decentralised with the IPPAP under the day to day control of port managers who had a large degree of autonomy but who would be responsible for the port's financial performance. Commercialisation is normally less difficult in countries where the private sector plays an important role in the national economy and where an appropriate legal framework is already in place to govern enterprises. In the case of Haiti these conditions are in the process to be in place soon. As commercialisation needs also a competitive environment we think that the proximity of Cuba and Jamaica where the port's sector is dynamic, could provide this competitive environment.

In the case of privatisation a strong government commitment is an indispensable condition ((UNCTAD, 1995, page 30). As privatisation needs to have a

broad-based consensus among the parties that means bureaucrats, managers, workers and the public at large again we think that the country is ready also for this type of port reform.

Chapter 5

Conclusion and recommendations

It has been increasingly agreed that a particular form of organisation should be developed to suit a particular situation in a given environment rather than a deliberate choice and preference dictated by external players. To corroborate such a standpoint, Nagorski warns in the following terms: “it would be risky to formulate a rigid set of rules and recommendations which would apply with equal validity to various ports, irrespective of existing practices and specific circumstances” (Nagorski, 1972, p180).

Likewise, the opinions of Professor Shuo Ma are in perfect agreement with the position of Nagorski. The former thinks that all attempts at copy a model of one port to another have proved to be a failure.

The author feels that the selection will consist of a combination of alternatives which seems to satisfy the requirements of this particular case. The so-called mix approach will benefit the port greatly as it will try to combine the best available options suited to its conditions.

Although a single strategy could be used in implementing the reform of the port, it is advisable to think of and adopt a mix that takes into consideration all port characteristics and conditions in view of matching them smoothly. This position is strengthened by the following statement made in UNCTAD document titled *Comparative Analysis of Deregulation, Commercialisation and Privatisation*: “suitable measures will depend on the circumstances and conditions of the port and no measures can be implemented easily” (UNCTAD, 1995, p16).

Owing to the fact that on one hand neither the Port Authority nor the State can afford the cost of modernising itself, and on the other hand privatisation will take long to integrate the socio-political conditions prevailing in Haiti, it would be sensible to advocate a meaningful commercialisation combined with a gradual level of participation of the private sector in the commercial aspects (Charles,1998).

As it can be easily understood, the mix option will confer the advantages inherent to commercialisation aspects and prepare the way for smooth transition while allowing the port to benefit sooner from injection of private capital. This option, if properly applied, will offer the port a wide range of advantages stemming from a private-like management, thereby achieving high efficiency of operations and better quality of services.

Bibliography

Alderton, P (1998). *An Analysis of Changes Concerning Ports. Lectures Notes.* Malmö, Sweden: World Maritime University.

APN (1997). *Les Ports Maritimes, Yearbook.* Port-au-Prince: APN.

Baudelaire, J G (1986). *Port Administration and Management.* Tokyo: IAPH.

Cargo Systems International (1997). 'Ports and Terminals.' *Cargo Systems*, Vol 24, No 4, April, p19.

CEPAL (1990). *Structural Changes in Ports and the Competitiveness of Latin American and Caribbean Foreign Trade.* Santiago: UN Economic Commission for Latin America and the Caribbean. dissertation. Malmö, Sweden: World Maritime University.

Drewry, H P (1971). *Perspectives on Third World Development.* London: Drewry Shipping Consultant.

Fairplay (1997). 'Looking for the New American Hubs'. *Fairplay*, September 18, p 13.

Frankel, E G (1987). *Port Planning and Development.* New-York: Massachussets Institute of Technology.

Holubowicz, R P (1985). *Progress in Cargo Handling.* Cambridge: Cornell Maritime Press, INC.

IAPH (1997). 'Port Ownership: Public Responsibility or Private Enterprise'. *Ports and Harbors*, vol 42, No 8, October 1997.

Jansson, O J (19996). *Transport System Optimization and Pricing.* UK: The Pitman Press Bath.

Julien, J (1989). *Development of Container Transportation in Port-au-Prince, Haiti.* MSc dissertation. Malmö, Sweden.: World Maritime University.

Lazarre, M (1997). *A Critical Analysis of the Performance of the Port of Port-au-Prince with a Focus on Waiting Time.* MSc dissertation. Malmö, Sweden: World Maritime University.

- Ma, S (1998). *Maritime Economics*. Lecture Notes. Malmö, Sweden: World Maritime University.
- Ma, S (1999). *Quantitative Methods for Decision Makings in Ports*. Lecture Notes. Malmö, Sweden: World Maritime University.
- Mancion, J M (1998). *Time in Port*. Lecture Notes. Malmö, Sweden: World Maritime University.
- Meridian Developers SA (1998). *Plan de Development du Port de Port-au-Prince*. Port-au-Prince, Haiti
- Nagorski, B (1998). *Ports Problems in Developing Countries: Principles of Port Planning and Organisation*: Tokyo: IAPH.
- Nettle, C S (1988). *Ports and Shipping: A Guide to Ports and Related Aspects of the Shipping og the Shipping*: London: Lloyd's of London press LTD.
- Nettle, S (1998). *Port Operations and Shipping : a Guide to Ports and Related Aspects of the Shipping Industry*. London: Lloyds of London.
- Oura-Sama, M (1987). *Port Productivity Improvement in the Port of Lome*. MSc
- Pallis, A (1997). 'Towards a Common Ports Policy? EU-Proposals and the Ports Industry's Perceptions'. *Maritime Policy and Management*, vol 24, No 4.
- Stuchtey, R W, editor (1990). *General Aspects of Port Management*. Bremen: Institute of Shipping Economics and Logistics.
- The Caribbean Shipping Association (1990). *Caribbean Ports Handbook*. Kingston, Jamaica: Creative Communications Inc., Ltd.
- United Nations Conference on Trade and Development (1995). *Comparative Analysis of Deregulation, Commercialisation and Privatisation of Ports*. Geneva: UNCTAD.
- United Nations Conference on Trade and Development (1982). *Improving Port Performance*. Cardiff: UK.
- Vanchiwar, P S (1996). *Maritime Administration/Maritime Safety Administration*. Malmö, Sweden: World Maritime University.