Port of Cotonou role in the subregional economic development in West Africa

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PORT OF COTONU
ROLE IN THE SUB-REGIONAL ECONOMIC
DEVELOPMENT IN WEST AFRICA
FORMULATING A PORT DEVELOPMENT POLICY

by

Yacoubou Mohamed

Benin

November 1985

A paper submitted to the Faculty of the World Maritime University in partial satisfaction of the requirements of the GENERAL MARITIME ADMINISTRATION COURSE.

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

Signature: 

Date: 01 November 1985

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PORT OF COTONOU
ROLE IN SUB-REGIONAL ECONOMIC
DEVELOPMENT IN WEST-AFRICA
- FORMULATING A PORT DEVELOPMENT POLICY -

BY: YACOUBOU MOHAMED
THE CONTENTS OF THIS PAPER REFLECT MY OWN PERSONAL VIEWS AND ARE NOT NECESSARILY ENDORSED BY THE WORLD MARITIME UNIVERSITY OR THE INTERNATIONAL MARITIME ORGANIZATION.

YACOUBOU MOHAMED

OCTOBER 1985

PAPER DIRECTED BY:
DR. A. A. MONSEF

THE WORLD MARITIME UNIVERSITY
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PREAMBLE

FOR A DEVELOPING COUNTRY LIKE OURS, THE PROBLEM OF TRANSPORT ASSUMES PARTICULAR IMPORTANCE. THE POSSIBILITY OF RATIONAL EXPLOITATION OF ALL OUR NATURAL RESOURCES, THE LOCATION OF NEW INDUSTRIES, DEVELOPMENT OF AGRICULTURE, A HARMONIOUS DEVELOPMENT OF ECONOMIC ACTIVITY AS A WHOLE AND EVEN THE ESTABLISHMENT OF CONTACTS BETWEEN POPULATIONS WHICH HAD PREVIOUSLY BEEN TOO ISOLATED AND THEIR TRANSITION FROM A SUBSISTENCE ECONOMY TO A MARKET ECONOMY AND THE GROWTH OF TRADE FLOWS, ALL DEPEND ON FINDING A SOLUTION TO THIS PROBLEM.

NOT FORGETTING THE IMPORTANCE OF OTHER MEANS OF COMMUNICATION WHICH EACH CONTRIBUTES INDIVIDUALLY TO THE GREAT WORK OF THE DEVELOPMENT OF OUR COUNTRY, IT IS OBVIOUS THAT SEA TRANSPORT HAS A SPECIAL ROLE, THAT IT IS THE PRIVILEGED MEANS OF ACHIEVING OUR GROWTH, AND IS THE SAFEST BET FOR OUR FUTURE.

THE CONSTRUCTION WHICH WE HAVE THE PLEASURE OF EXPLAINING IN THIS DISSERTATION, THE PORT OF COTONOU, REPRESENTS A VALUABLE LINK IN THE CHAIN OF SEA TRANSPORT, IT GIVES AN ACCOUNT OF THE DOUBTS WHICH HAD TO BE QUELLED, THE DIFFICULTIES THAT HAD TO BE OVERCOME, CONTINUOUS DEVELOPMENT AND OF THAT WHICH LED TO THE IRREVOCABLE DECISION OF THE GOVERNMENT OF OUR COUNTRY TO UNDERTAKE ITS CONSTRUCTION AND THEN ITS ENLARGEMENT.

THE PORT OF COTONOU BECAME OPERATIONAL IN APRIL 1965 AND THE PORT WHICH RESULTED FROM THE EXTENSION WAS BROUGHT BACK INTO
SERVICE IN 1982; IT THEREFORE SEEMED APPROPRIATE TO ANALYSE THE ROLE OF THE PORT OF COTONOU IN REGIONAL ECONOMIC DEVELOPMENT IN WEST AFRICA SINCE IT WAS FIRST BROUGHT INTO SERVICE; TO UNDERTAKE AN ANALYSIS OF ACTIVITY IN THE PORT, ESPECIALLY IN RELATION TO INTERNATIONAL TRANSPORT OF GOODS IN THIS SUB-REGION OF AFRICA AND THE FORMULATION OF A POLICY OF PORT DEVELOPMENT.
Carte Relative aux Axes de Transit des Pays Enclavés de l’Afrique de l’Ouest :
CHAPTER I
INTRODUCTION TO PORT DEVELOPMENT

1.2. TRADE DEVELOPMENT


SEA TRANSPORT IS OF PRIMORDIAL IMPORTANCE IN THESE INTERNATIONAL EXCHANGES; THIS GOES WITHOUT SAYING FOR DEVELOPED COUNTRIES, PARTICULARLY IN THE CASE OF HOLLAND (WHOSE IMPORTED OR EXPORTED PRODUCTS HAVE TO BE CONVERGED BY SEA), BUT IT IS TRUER FOR TRADE IN DEVELOPING COUNTRIES. IN ACT RAW MATERIAL OR SEMI-FINISHED PRODUCTS, WHICH MAKE UP THE BULK OF THE EXPORTS OF DEVELOPING COUNTRIES ARE BROUGHT TO INDUSTRIALIZED COUNTRIES, WHILST IMPORTS COMING FROM THE LATTER ARE FOR THE MAJOR PART MADE UP OF MANUFACTURED PRODUCTS; IT IS ESTIMATED THAT BETWEEN 70 and 90% OF EXPORTS COMING FROM DEVELOPING COUNTRIES ARE DESTINATED FOR DEVELOPED COUNTRIES AND THEY ARE TRANSPORTED BY SEA.

THERE IS THUS A CLOSE LINK BETWEEN SEA TRANSPORT AND THE OUTLOOK FOR ECONOMIC DEVELOPMENT, AND THE PORT AS AN INTERVENING ELEMENT IN THIS PROCESS OF ECONOMIC DEVELOPMENT IS THE DETERMINING FACTOR AND ACTS AS A CATALYST.
SO WHAT DOES THE PORT SYSTEM CONSIST OF? IN INTERNATIONAL TRADE, THE PORT IS THE MAIN CENTRE OF CONSIGNMENT AND RECEIPTION OF GOODS WITH ALL THE COMPLEXITY OF THE OPERATIONS CONCERNING THE TREATMENT OF THESE GOODS (BEFORE OR AFTER DISEMBARKATION) THAT IT CREATES, IT IS THE LINK IN THE CHAIN WHERE THE MEANS OF SEA TRANSPORT IS CONNECTED TO ALL FORMS OF LAND TRANSPORT.

1.2. HISTORICAL ADVENT OF PORT IN AFRICA


FROM THE 16TH CENTURY ONWARD SEA SHIPPING RELAYED THE MANY CARAVANS WHICH USED TO CROSS THE SAHARA DESERT. IN THE 19TH CENTURY THE EXCHANGES OPEN, WITH THE PACE OF ECONOMIC DEVELOPMENT, BETWEEN THE WEST EUROPEAN CONTINENT AND THE WEST AFRICAN COASTS; MORE THAN 90% OF THESE WERE EFFECTED BY SEA, THAT IS TO SAY IN AFRICA FROM NOW IT WAS THE PRIMACY OF THE SHIP, THE PORT AND ITS LINKS WITH THE HINTERLAND.

1.3. CONTINUOUS EXPANSION OF THE PORT OF COTONOU

IN BENIN TWO EMBRYONIC CENTRES QUIDAH AND GRAND-POPO SERVED AS MARITIME OPENINGS ON TO THE ATLANTIC - TOWARDS THE

THE POSITION OF COTONOU ON THE COAST WAS FAVOURABLE TO THE CARRYING OUT OF SUCH A PROJECT, AND WORK WAS COMPLETED IN 1928.


BETWEEN NOVEMBER 1959 AND JUNE 1965 THE CONSTRUCTION WORK OF THE PORT OF COTONOU COMMISSIONED TO FRENCH FIRMS AND IN PARTICULAR TO BCEOM (BUREAU CENTRAL D'ETUES POUR L'EQUIP-MENT D'OUTRE-MER) CAME TO AN END.

THE PORT HAD A THEORICAL CAPACITY OF 400,000 TONS AND IN-CLUDED AN ACCESS CHANNEL, PROTECTIVE FORTIFICATION QUAY-SIDE CONSTRUCTIONS (WITH A CONVENTIONAL PORT AND A TRANSPORT
PORT), SUPERSTRUCTURES, PLATFORMS, WAREHOUSE.

FROM 1965 TO 1972, THAT IS IN UNDER TEN YEARS THE PORT INSTALLATIONS NO LONGER MET THE EVER-GROWING NEEDS OF THE TRAFFIC (570,000 TONNS IN 1970) AND MOST OF ALL THE TRAFFIC COMING FROM COUNTRIES USING THE PORT OF COTONOU, NIGER, BURKINA FASO, MALI.


FROM THIS CAME TWO ORDINARY POSTS, EACH 180 M IN SIZE, A CONTAINER POST OF 220 M, A ROLL-ON - ROLL-OFF, STOCKS WAREHOUSE OF 1,800 M², A CONTAINER HARBOUR OF 65,000 M², HUGE BITUMEN-SURFACED PLATFORMS, RAIL TRACKS AND A COMPLETE NETWORK OF MANITATION AND WATER SUPPLY. THIS PROJECT OF THE PORT EXTENSION WAS EVALUATED AT A TOTAL OF 13 BILLION, 500 MILLION CFA FRANCS, WITH A VIEW TO 1,888,000 TONNES OF TRAFFIC IN 1985, THE NEW PORT OFFERED THE FOLLOWING ECONOMIC ADVANTAGES; REDUCTION IN SHIP WAITING TIME, REDUCTION IN EXTRA TRANSPORT COSTS, REDUCTION IN SERVICE TIME.
CHAPTER II
PORT OF COTONOU: PRESENTATION

2.1. REGIONAL LOCATION

The port of Cotonou is located on a low lying sandy coast at the southern edge of the town of Cotonou. Its geographical position can be defined as follows: 6°21'2"N, 2°26'3"E. It can be seen how it is at equal distance from the ports of Lagos in Nigeria (115 km) and from Lome in Togo (135 km). The port of Cotonou which only served the Benin region, Niger and Togo (until the building of the port of Lome) saw the emergence of traffic for Mali, and new flow of traffic for Burkina Faso and the Nigerian traffic which was conveyed through Cotonou from 1975, particularly after the widespread congestion of Nigerian ports. This diverse traffic is the result of the privileged geographical position of Benin in the subregion of Western Africa. In fact the relatively flat and undulating relief of the Benin region provides a natural transport corridor for the neighbouring enclosed countries. Moreover the port of Cotonou proves to be the opening on to the sea for the Niger, the shortest way to serve East Mali and Burkina Faso. The connections between Cotonou and the main towns of these countries are among the shortest, going in the direction Niger, Miamey is only 1,058 km away, towards Burkina Faso, Fada N'Gourma is at a distance of 785 km, towards Mali, Asongo is at 1,417 km, and Gao at 1,516 km. All other possible ways of access to the sea are
GENERALLY LARGER AND SOMETIMES MORE DIFFICULT TO NEGOCIATE:

2.2. **PRINCIPAL MARITIME AXLE OF ENCLOSED TERRITORIES**

The traffic of a port with enclosed territories is influenced by the quality of communication lines between the port and the national and international network, consequently a port must provide rapid and smooth transit between long haul transport and the port zone. It is thus useful to establish a chart showing distances from the hinterland countries to the port of Cotonou, in fact the Benin region proves to be the fastest and easiest corridor of access to serve these countries, Niger; Burkina Faso; Mali.

For the Niger region:

* Combined rail/road link Cotonou - Parakou - Dosso - Miaméy 1,058 KM; (Rail 438 KM, Road 620 KM)
* Road link Cotonou - Parakou - Dosso - Niamey 1,060 KM
* Cotonou - Maradi (Central Niger) 1,454 KM
* Cotonou - Zinder (East Niger) 1,691 KM
* Cotonou - Agadez (North Eastern zone of the Nakan and the Sahara) 2,162 KM

For the Burkina Faso region:

* Combined rail/road link Cotonou - Parakou - Porga - Fada M'Gourma - Ouagadougou 1,058 KM (438 KM rail, 620 KM road)
* Road link Cotonou - Sankou - Porga - Fada M'Gourma - Ouagadougou 1,008 KM
* Cotonou - Fada M'Gourma 785 KM
2.3. ORGANIZATION: THE ADMINISTRATIVE ASPECT

DIFFERENT ORGANIZATIONS INTERVENE IN THE PORT SYSTEM. IN THE ADMINISTRATIVE STRUCTURE WHICH CONTROLS THE COMPLEX FUNCTIONS OF THE PORT WE CAN QUOTE: THE AUTONOMOUS PORT OF COTONOU (PAC)\(^1\), TRANSIT AND CONSIGNMENT FIRMS OF (SONATRAC, SOTRACOB)\(^2\). THE AUTONOMOUS PORT OF COTONOU IS A NATIONALISED BODY OF AN INDUSTRIAL AND COMMERCIAL NATURE, IT WAS CREATED UNDER THE LAW No. 6439 ON 31ST DECEMBER 1964; THIS LAW WAS LATER MODIFIED BY THE AMENDMENT No. 76-55 OF OCTOBER 12ST 1976. IT IS A "OWNER'S" PORT OF INFRASTRUCTURE AND SUPERSTRUCTURE (WATER SURFACE, QUAY, PLATFORMS, HANGARS) RATHER THAN A "UTILITARIAN" PORT WHICH OFFERS ITS USERS THE LINE OF HANDLING EQUIPMENT ON THE QUAYSIDE OR A LARGE RANGE OF EQUIPMENT ON SHORE, OR A SERVICE PORT WHICH PROVIDES SERVICES RANGING FROM THE RECEPTION OF SHIPS TO THE HANDLING OR STOCKING OF GOODS. IT FOLLOWS THAT ACTIVITY IN THE PORT ZONE OF COTONOU IS CARRIED OUT BY SEVERAL ORGANIZATIONS, THE AUTONOMOUS PORT AUTHORITY (RECEPTION OF SHIPS, HIRING OF WAREHOUSES) OBEMAP (HANDLING ON BOARD AND ON SHORE, STOCKING) AND THE TRANSIT COMPANIES (CONSIGNMENT OF GOODS).


FOOTNOTE:
SEEN FOLLOWING PART DETAILED STUDY OF THESE ORGANIZATIONS (1), (2)

2.4. A GLANCE AT THE EVOLUTION OF THE TRANSIT SYSTEM IN WEST AFRICA

THE NIGER, THE BURKINA FASO AND THE MALI REGIONS FORM A LARGE AREA SITUATED IN THE HEART OF AFRICA IN THE SAHEL ZONE. THANKS TO TECHNICAL PROGRESS (WITH THE USE OF LORRIES, RAILWAYS, PLANS) THE GOODS FROM THESE REGIONS MOVE RAPIDLY
In the direction of other countries beyond the Atlantic Sea. The result of this was obviously the growth of intermediate poles notably those ports (Dakar, Abidjan, Cotonou) linked with the vast hinterland and thus the development of the function of transit in the zone. To this effect certain ports serve as traditional corridors of transit for these countries, thus the port of Dakar serves Mali, Abidjan serves Burkina Faso and Cotonou serves Niger. The evolution of the function of transit in this economic environment is also linked to the development of exchange flows (imports/exports) with the exterior.

It can be remarked that the regional function or even the size of West African ports depends in the end on their capacity to move regularly the transit traffic of one or several of these enclosed countries.

How does port transit proceed?

Port transit is presented as whole range of operations concerning the passing through of the goods in the port from reception of the ship under hoists to their delivery to the warehouse of the proprietor or receiving agent. Additionally it includes the administrative formalities which follow a certain number of procedures, calling for the use of complex documents.

The outline of the mechanism of port transit is as follows:

* Physical operations which take place strictly in the port
ITSELF.
(STEVEDORING, STOCKING, DELIVERY BY RAIL WAGON OR LORRY)
* SURFACE TRANSPORT (BY ROAD, RAIL, WATERWAYS)
* CUSTOMS STOCKING IN IMPORTING COUNTRIES
* DELIVERY TO PREMISES OF IMPORTER.

IT MUST BE NOTED THAT THE ELEMENTS OF TRANSPORT COST ARE AN IMPORTANT PARAMETER IN EVALUATING THE COMPETITIVENESS OF A PORT; AS FAR AS OUR STUDY IS CONCERNED WE WILL EXAMINE THE ACTIVITIES OF THE PORT OF COTONOU WITH RELATION TO THE TRANSIT OF GOODS.
CHAPTER III

PORT OF COTONOU: ACTIVITIES IN THE TRANSPORT OF GOODS

3.1. PORT OPERATIONS

3.1.1. NATIONAL SHIPPING ACTIVITY: COBENAM

Benin Republic like most African countries has no maritime tradition before; this lack of experience will be noticed in the co-ordination and the consistent of a viable shipping policy. Nevertheless big efforts are engaged. Bilateral agreement between Republic of Algeria and Republic of Benin created a shipping company named COBENAM (COMPAGNIE BENINOISE DE NAVIGATION MARITIME).

Benin foreign trade is not so bulky thus the COBENAM shipping company uses conventional ships only (2,000 to 9,000 DWT). The shipping company started its commercial activities in May 1975 chartering in time ten ships which are in regular liner service between Cotonou and Hamburg. Since 1977 the shipping line became member of the Continental West Africa conference (COWAC) and in 1983, member of the Mediterranean West Africa conference (MEWAC). It is represented in North European continent ports. Besides shipping activities the COBENAM line exercises at the same time in Cotonou port the role of representation of many shipping lines calling at this port.

At present it is noticed that exploitation of the fleet is going bad to worst, the company is confronted with diffi-
CULTIES BECAUSE OF THE NATIONAL TRAFFIC DECLINE AND THE CRITICAL ECONOMIC SITUATION OF AFRICAN COUNTRIES. IT IS IMPORTANT FOR THE COBENAM SHIPPING COMPANY AUTHORITIES TO ADOPT STRATEGIES IN ORDER TO ATTAIN THE PROFITABILITY POINT. THE GENERAL MANAGER'S SKILL TO DESIGN ONE STRATEGY RATHER THAN ONE ANOTHER MIGHT BE DETERMINATIVE IN OBTAINING NEW MARKETS AND INCREASING THE ACTIVITIES OF THE COMPANY.

3.1.2. CARGO HANDLING: OBEMAP

IN THE PORT OF COTONOU, THE OBEMAP COMPANY (OFFICE BENINOIS DE MANUTENTION PORTUAIRE) IS MAINLY RESPONSIBLE OF CARGO HANDLING; CONSEQUENTLY IT IS IN CHARGE OF LOADING AND UNLOADING, THE TRANSSSHIPMENT OF CARGOES AND STOWING. THIS COMPANY IS A PUBLIC INDUSTRIAL AND COMMERCIAL BODY; IT HAS BEEN CREATED IN 1969.

THE OBEMAP COMPANY IS A LINK IN THE CHAIN OF MARITIME TRANSPORT, IT INTERFERES BETWEEN THE LAND TRANSPORT AND THE SEA TRANSPORT WHEN THERE IS BREAKING OF LOAD; IT RE-ESTABLISHES THE CONTINUITY OF MOVEMENT DIRECTING THE CARGO FROM THE LORRY ASHORE TO THE SHIP AND VICE VERSA WITH LIFTING MATERIALS OR ROLL ON - ROLL OFF. TO ACCOMPLISH THE ACTIVITIES, THE COMPANY HAS GOT AT ITS DISPOSAL THE FOLLOWING RESOURCES:

* CARGO HANDLING EQUIPMENT, FOUR FORK-LIFTS WITH 40 TONS CAPACITY TO HANDLE CONTAINERS, TWELVE FORK-LIFTS WITH 10 TONS CAPACITY, SIXTEEN TOWING VEHICLE, TWENTY-TWO TRAILERS, THREE LOADERS, THREE SKIPS TRUCKS AND OTHER
SKIPS TO HANDLE BULK CARGOES.

* CONCERNING HUMAN FACTORS, THE COMPANY EMPLOYES 3,000 WORKERS; THE DOCK-WORKERS ARE 90 TO 95% OF THE TOTAL, THEY ARE DIVIDED IN MANY GROUPS OF WHICH THE NUMBER OF EACH ONE DEPENDS UPON THE TYPE OF CARGO HANDLING THEY UNDERTAKE.

THE OBEMAP COMPANY IS COMPOSED WITH FIVE DIFFERENT OFFICES: QUAY OFFICE, EQUIPMENT DEPARTMENT, COMMERCIAL DEPARTMENT, FINANCIAL DEPARTMENT, TRAFFIC AND CONTENTIONS DEPARTMENT.

THE ADEQUACY OF CARGO HANDLING SERVICES OFFERED BY THE COMPANY INDICATES THE PRODUCE OF 2,500 TONS OF SULPHUR HANDLED PER DAY. CONTAINERS ARE DISCHARGED 12 PER HOUR AND PER HOLD; 60 TONS OF OTHER GOODS AND 150 TONS OF BAGS ARE HANDLED BY EACH GROUP OF DOCK-WORKERS PER DAY.

THE TONNAGE OF GOODS YEARLY HANDLED IS ESTIMATED TO 900,000 TONS.

3.1.3. TRANSIT OPERATIONS

SONATRAC (SOCIETE NATIONALE DE TRANSIT ET DE CONSIGNATION) IS A FORWARDING COMPANY CREATED IN 1973 BY BENIN STATE WHO DETAINS THE MONOPOLY OF THE SHARES; THE COMPANY IS AN INDUSTRIAL AND COMMERCIAL BODY, IT IS FINANCIALLY INDEPENDENT. ACCORDING TO ITS STATUS IT IS IN CHARGE OF TRANSIT ACTIVITIES, BROKERAGE, CARRIER CONSOLIDATOR AND TRANSPORT CO-ORDINATOR. IT IS WORTH NOTING THAT SOMATRAC'S ACTIVITIES ARE TURNED MAINLY TO TRANSIT OF CARGOES BELONGING TO BENIN STATE.
COMPANIES AND OFFICES; BESIDES NIGERIA BUSINESS MEN APPEAR AN IMPORTANT PART OF ITS CUSTOMERS. NOW, THE SONATRAC COMPANY IS ALMOST ABSENT IN THE INTERNATIONAL TRANSIT FIELD.

SOTRACOB (SOCIETE DE TRANSIT ET DE CONSIGNATION DU BENIN), THIS FORWARDING COMPANY HAS BEEN CREATED IN 1975 TO SUBSTITUTE FOREIGN FORWARDING AGENTS SETTLED IN COTONOU BEFORE; ITS STATUS IS MIXED COMPANY WHERE BENIN GOVERNMENT IS 65% SHAREHOLDER AND PRIVATE BUSINESS MEN DETAIN 35% OF THE SHARES. THIS COMPANY IS WELL EQUIPED; ITS ACTIVITIES CONCERN BOTH MARITIME TRANSIT AND AIR TRANSIT.

IT'S BASED IN MANY PLACES, COTONOU, PARAKOU, NIKKI, NIAMEY. ACCORDING TO CERTAIN AGREEMENTS BETWEEN BENIN STATE AND NIGER STATE, THE SOTRACOB COMPANY IS ENTITLED TO TREAT ONE THIRD OF TRAFFIC OF TRANSIT COMMODITIES OF NIGER REPUBLIC.

3.1.4. COTONOU PORT AND ITS HINTERLAND

(SEE IN ANNEX A MAP RELATED TO THE PORT AND ITS HINTERLAND) THERE IS NO DOUBT THAT A PORT EXPANSION DEPENDS UPON THE QUANTITY, THE QUALITY AND THE VALUE OF FREIGHT WHICH IS CARRIED ACROSS; THIS TRANSIT FUNCTION IS IMPORTANT BECAUSE OF THE STRUCTURE AMID THE INTERNATIONAL TRADE OBSERVED NOW. THUS, THE GROWTH OF A PORT SEEMS TO BE DEPENDING UPON A MAJOR FACTOR, ITS LOCATION VIS-A-VIS HINTERLAND IN OTHER WORDS AREAS WHICH NEED EFFECTIVELY AND POTENTIALLY ITS SERVICES. IN THE PORT OF COTONOU, COMMODITIES EXPORTED AND IMPORTED ARE THOSE DESTINED TO NATIONAL HINTERLAND AND THOSE
IN TRANSIT FOR LAND-LOCKED COUNTRIES. THE DELIMITATION OF A SECONDARY HINTERLAND WILL CONSIST OF REGIONS NIGER, BURKINA FASO AND MALI INFLUENCED BY TRADITIONAL COMMERCIAL RELATIONS EXISTING BETWEEN THOSE COUNTRIES AND BENIN STATE.

FOR NIGER REGION, THE INFLUENCE OF THE PORT OF COTONOU IS PREPONDERANTE IN MARITIME EXCHANGES OF THIS COUNTRY AND OVERLAND FACTOR IS THE SHORTEST AND THE CHEAPEST COMPARED TO OTHER PORTS. THAT INFLUENCE IS THE RESULT OF AN HISTORICAL PHENOMENA.

SINCE COLONIAL PERIOD AND DURING LONG TIME, THE WHARF OF COTONOU BUILT IN 1891 HAS BEEN THE UNIQUE INSTRUMENT SERVING FOR UNLOADING AND SHIPMENT OF GOODS; THE RAILWAY COMPANY (OCBN) BELONGING TO BENIN AND NIGER CREATED AT THAT SAME EPOCH WAS WORKING.

IN 1950 IT APPEARED THE NEED OF BUILDING A PORT AND THAT SHOULD PLY BETWEEN BOTH BENIN AND NIGER THEN TOGO. THUS, SINCE THE PORT OF COTONOU HAS BEEN PUT INTO SERVICE IN 1965, ITS TRANSIT FUNCTION STRENGTHENED VIS-A-VIS NIGER. SOME YEARS AGO THE GOVERNMENTS OF BENIN AND NIGER DECIDED TO LENGTHEN THE RAILWAY FROM PARAKOU TO MIAMEY, THEY CONFERED HIGH PRIORITY TO THAT PROJECT. THIS DECISION UNDERLINES THE WILL OF THOSE COUNTRIES TO STRENGTHEN THEIR COOPERATION AND TO USE THE PORT OF COTONOU AS A PRECIOUS TOOL FOR THEIR ECONOMY EXPANSION.

CONCERNING EAST PART OF MALI, THE INFLUENCE OF THE PORT OF
Cotonou is growing progressively; the asphalting of the road Miamey - Tillabery - Lebeganga (border of Mali) has been done partly, it could be ended in 1985. It is worth noting that, up to now, hydrocarbour constitute the traffic coming in transit in Cotonou port to Gao destination (Mali).

For Burkina Faso region, big efforts are displayed to set up suitable infrastructure between this country and Benin. The two countries have already built (Common Fund) a bridge on the river Pedjari (border between Benin and Burkina Faso). The influence of the port of Cotonou in east part of Burkina Faso depends upon the economical development of that area which is mainly agricultural and contains mineral resources.

3.2. Port of Cotonou, servant of foreign trade; expanding of an international transit

Port authorities in Cotonou apply bilateral agreements and fundamental principles of United Nations conventions on trade and international transit of land-locked countries for passing commodities of Niger, Burkina Faso and Mali. So, they recognize the right for those countries without littoral to have access to the sea; furthermore port authorities admit for these countries the complete exemption of custom - duty and other transit taxations due to import or export cargoes.
3.2.1. TRANSIT CARGOES FOR LAND-LOCKED COUNTRIES

NIGER:

TRANSIT TRAFFIC OF NIGER STATE IS THE MOST IMPORTANT IN THE PORT OF COTONOU. IT IS PERCEPTIBLY REGULAR AND INCREASING. THIS TRAFFIC IS MAINLY A FLOW OF IMPORT (90%) COMPRERENDED HYDROCARBONS, BULK CARGO (CHEMICALS PRODUCTS CEREALS) AND OTHER GOODS IN CONTAINER OR CONVENTIONAL CARGO. EXPORT TRAFFIC IS COMPOSED MAINLY WITH CHEMICAL PRODUCTS (URANAT 6,000 TONS PER YEAR).

BILATERAL AGREEMENTS BETWEEN BENIN STATE AND NIGER STATE DEFINE CARGO TRANSIT CONDITIONS FROM THE PORT AREA IN COTONOU TILL THE BORDER OF NIGER. THOSE FACILITIES OF PASSING CONCERN THE USE OF PORT INSTALLATIONS NAMELY BERTHERY OF VESSELS CARRYING COMPLETE CARGO FOR NIGER STATE, THE TRANSFER OF PORT OF LAND IN PORT AREA FOR STORING GOODS, STATIONING TIME OF COMMODITIES OF NIGER (WITHOUT TAXES) LONGEST THAN NATIONAL CARGO IN WAREHOUSES SOME GOODS PROCEEDING OR DESTINED FOR DISTANT REGIONS OF NIGER (TAHOUA, AGADES, ZINDER, ARLET ...) SUBMISSIVE TO HIGH INLAND TRANSPORT COST, PROFIT OF PREFERENTIAL PORT TARIFFS.

CONCERNING CUSTOM PROCEDURES, AN AGREEMENT BETWEEN BENIN STATE AND NIGER PLACES GOODS DESTINED FOR NIGER UNDER INTERNATIONAL TRANSIT RULE. SO, THE UNIQUE DOCUMENT ESTABLISHED AT THAT OCCASION IS NAMED "L'ACQUIT A CAUTION (FORMULAIRE D15 OR D15 BIS)" WITHOUT OTHER TAXES BEFORE CARRYING OFF THE GOODS.

CARGO TRANSIT EVOLUTION THROUGH THE PORT OF COTONOU COMPARED TO THE TOTAL IMPORT OF NIGER STATE FOREIGN TRADE.

\[ U = \text{MILLIERS DE TONNES} \]

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<td>100%</td>
<td>40%</td>
<td>60%</td>
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<tr>
<td>1981</td>
<td>706</td>
<td>329</td>
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<tr>
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<td>1982</td>
<td>nd</td>
<td>317</td>
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</tr>
<tr>
<td>%</td>
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(1): HYDROCARBURES, CEREALES, SOUFRE, SEL.
MALI:

The Port of Cotonou and the Port of Lomé are marginal transit ports as far as transport of foreign trade of Mali is concerned and that would apply to 500,000 tons per year of cargo from/to overseas countries. But now transit cargo destined for Mali state passing through the Port of Cotonou is increasing, from 3,500 to 5,000 tons per year, obviously it is better than which is registered in 1978. For increasing the traffic it is foreseen a rate of 5% per year; the transaction concerns hydrocarbons, foods and other goods.


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<td>TOTAL</td>
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SOURCE: PORT AUTONOME DE COTONOU

BURKINA FASO:

Exchanges between Burkina Faso state and overseas countries in transit by the Port of Cotonou were almost non-existent. They have been effective in 1982 with hydrocarbures mainly and other goods. Now this country has got at its disposal
A portion of land of 2,000 m² in the port area for setting transit commodities.


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<th>1982</th>
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<td>TOTAL</td>
<td>17</td>
<td>28</td>
<td>8,657</td>
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</table>

Source: Port Autonome de Cotonou

3.2.2. TRANSPORT - DELIVERY FOR LAND-LOCKED COUNTRIES

A well organized inland transport system is very important to connect economical zones to port area and for the expansion of port hinterland. In Benin state that is made by the railways and the road system.

Since 1959 Benin and Niger take advantage of a railway company named OCBN (Organization Commune Benin-Niger). The OCBN railway company is an industrial and commercial public body; it is under the control of both Benin ministry of transport and Niger ministry of transport. The primary task of this company is to carry goods from the port of Cotonou till Parakou then to organize the final distribution of those goods to destination of Niger, Burkina Faso.
AND MALI. THE RAILWAY SYSTEM CONSISTS OF:
NORTH LINE COTONOU-PARAKOU 438 KM
COASTAL LINE EAST PART COTONOU-POBE 107 KM
COASTAL LINE WEST PART PAHOU-SEBROROUÉ 34 KM

THE RAILWAY IS THE LEADING TRANSPORT MODE BUT IT IS RELIEVED
BY THE ROAD SYSTEM WHICH CONNECTS FIRST THE ATACORA REGION
IN BENIN TO BURKINA FASO STATE, THEN THE BORGOU REGION IN
BENIN TO NIGER STATE AND MALI STATE. THOSE DIFFERENT MEANS
OF TRANSPORT PERMIT TO DRAIN THE ECONOMICAL ZONES TOWARDS
THE PORT OF COTONOU. THE FREIGHT BUREAU OF THE COMPANY IS
LOCATED IN PARAKOU OF WHICH THE ROLE IS TO DIVIDE CARGO
BETWEEN OTHER CARRIERS FOR THE DISTRIBUTION TO THE FINAL
DESTINATION. GOODS CARRIED ARE MAINLY CEREALS, CHEMICAL
PRODUCTS, HYDROCARBURES, SALT, OTHER FOODS, MATERIAL OF
EQUIPMENT.

THE OCBN RAILWAY COMPANY CO-OPERATES WITH ROAD TRANSPORT
ASSOCIATIONS IN NIGER, BURKINA FASO AND MALI TO FACILITATE
THE CARRIAGE OF THOSE COMMODITIES AND GRANTS A PREFERENTIAL
TARIFF. SOME OF THOSE ASSOCIATIONS ARE MAINLY STNT (SOCIETE
NATIONALE DE TRANSPORTS NIGERIANS), TRANS-BENIN (TRANSPORT
BENIN), CIT (CENTRE INTERNATIONAL DE TRANSACTIONS) AND
OTHER PRIVATE CARRIERS.
3.2.3. TRANSIT CARGOES FOR NEIGHBOURING COUNTRIES

NIGERIA - TOGO

In 1975 the ports of Nigeria were congested. The port of Cotonou benefited from that situation indeed; a part of land (20,000 m²) in the port area had been offered to Nigeria State for the transit of its goods. Between 1977 and 1980 the tonnage of transit goods increased 213,000 to 548,000 tons. The transhipment of hydrocarbures proceeding from Lagos was effected in the port of Cotonou for export in overseas countries.

Actually transit cargoes for Nigeria have decreased since the coming into service of new port infrastructures in Lagos. Nevertheless one can always notice the use of the port of Cotonou for the transit of cereals and some goods destined to the north of Nigeria.

Road connexions between Benin and Nigeria are very perfect. The two countries agreed on a project of building premises to constitute common custom offices and security centres; that should simplify the fulfilment of custom procedures and accelerate the distribution of commodities destined to Nigeria State. The economical co-operation between the two countries in the industrial sector (cement factory of Quibolo and sugar factory of Save common to Nigeria and Benin) should permit exchange relations to progress.

Concerning Togo State, cargo transit destined to this
COUNTRY IS NOT REGULAR; SOME EXAMPLES 7,305 TONS IN 1980, 3,293 TONS IN 1981, 6,056 TONS IN 1982.

THE TRAFFIC CONSISTS OF AN IMPORTANT PART OF HYDROCARBURES.

3.2.4. ANALYSIS OF TRAFFIC EVOLUTION IN THE PORT OF COTONOU

TRAFFIC FORECAST STUDIES UNDERTAKEN DURING THE COMING INTO SERVICE OF THE PORT INSTALLATIONS IN 1965 HAVE FORESEEN THAT IN 1985, 900,000 TONS OF CARGO WOULD BE HANDLED. BUT PORT STATISTICS ANALYSIS VERIFY A TRAFFIC GROWTH FROM 450,000 TONS IN 1968 TO 681,619 TONS IN 1972, THEN 1,133,574 TONS IN 1982 WITH A CAPE OF 1,500,000 TONS IN 1979. THIS LAST FIGURE ENREGISTED IN 1979 IS EXCEPTIONAL AND RESULTS FROM TRAFFIC OF HYDROCARBURES OF NIGERIA IN TRANSHIPMENT IN THE PORT OF COTONOU.

SINCE 1965 TILL 1982 THE TOTAL TRAFFIC OF IMPORTS AND EXPORTS INCREASED REGULARLY AT 6.7% PER ANNUM, THAT IS THE EFFECT OF AN EXPANSION OF COMMODITIES IMPORTED; FOR GOODS EXPORTED THE TONNAGE DECREASED TO 7% PER YEAR. THE CONSEQUENCES OF THOSE RESULTS EXPLAIN THE SIGNIFICANT GROWTH OF IMPORTATIONS IN THE TOTAL PORT TRAFFIC (79% IN 1965 TO 95% IN 1982).

IN 1983, THE PORT OF COTONOU HAD BEEN AFFECTED BY THE WORLD ECONOMICAL CRISIS SO THE TRAFFIC BENDED PLAINLY TO 800,581 TONS; AT THAT PERIOD THE IMPORTS DECREASED.

THE IMPORTS IN THE PORT OF COTONOU CONSIST OF FOUR GROUPS
OF PRODUCTS MAINLY HYDROCARBURES, DRYBULK CARGO (CLINKER, GYPSE, SULPHUR ...), CEREALS AND OTHER GOODS.

THE TENDENCY IS REVERSE FOR THE EXPORTS; IN FACT CARGO EXPORT FOR BENIN STATE BENDED TO 4% PER YEAR, THAT OF NIGER STATE PASSING THROUGH THE PORT OF COTONOU DECREASED TO 18,9% PER ANNUM.

THE TOTAL EXPORT TRAFFIC OF THE PORT DECLINE FROM 30% IN 1965 TO 5% IN 1982. BENIN AND NIGER ARE THE TWO COUNTRIES USING THE PORT OF COTONOU FOR EXPORT GOODS. AGAIN BENIN AND NIGER ARE FURTHERMORE COMPARATIVELY TO OTHER COUNTRIES THE MAIN PORT USERS FOR IMPORT GOODS.

CONTAINERS TRAFFIC MAINTAINS AN IMPORTANT LEVEL IN THE GLOBAL PORT TRAFFIC, 13,80% IN 1982, 16,79% IN 1983; MORE AND MORE THIS TRAFFIC IS EXPANDING IN THE PORT OF COTONOU.

IT IS WORTH NOTING THAT IN TERMS OF TONNAGE THE TOTAL PORT TRAFFIC OF IMPORTS AND EXPORTS IN COTONOU HAVE GROWN THREE TIMES SINCE 1965 TILL 1982. NOW, FORESEEING A NEW TRAFFIC EXPANSION IN THE PORT OF COTONOU MEANS TO RELY NECESSARILY ON THE PERSPECTIVES OF FOREIGN TRADE DEVELOPMENT OF BENIN STATE AND HINTERLAND COUNTRIES NAMELY NIGER, BURKINA FASO, MALI; THOSE PERSPECTIVES MUST BE ENCOURAGING SUCH AS TO JUSTIFY A NOTABLE GROWTH OF PORT TRAFFIC.
## Évolution du tonnage du port de Cotentin

(1966 à 1981)

Tonnages en milliers de tonnes

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### Évolution du trafic du port de Cotonou (suite)

(1974 à 1977)

Tonnages en milliers de tonnes

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## Évolution des trafics du port de Cotjoù (suite et fin)

(1978 à 1981)

Tonnages en milliers de tonnes

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CHAPTER IV

FORMULATING A PORT DEVELOPMENT POLICY

IN THE CONTENT OF THE PREVIOUS CHAPTERS CERTAIN MAIN FACTORS RELATED TO THE STANDARD FORM PORT ANALYSIS AND DEVELOPMENT HAVE BEEN STATED INSIGHT OF THE ITEM OF THIS PROJECT; SOME BASIC FACTORS REGARDING THE LOCATION OF THE PORT NOT LEAST IN RELATION TO OTHER PORTS AND TRANSPORT CENTERS, THE PORT FACILITIES, THE SOCIO-ECONOMIC ENVIRONMENT OF THE PORT, PORT AUTONOMY, PORT ACTIVITIES. BUT IN PORT STUDIES, GENERALLY TWO MAIN SUBJECTS CAN BE IDENTIFIED, VIZ IMPROVEMENT OF THE EXISTING SITUATION, AND DESIGN OF A REQUIRED FUTURE SITUATION; IN THIS CONTEXT WHAT COULD BE THE GUIDING SENSE OF PORT DEVELOPMENT? HOW COULD IT BE APPLIED TO PORTS IN DEVELOPING COUNTRIES?

4.1. MAIN FEATURES OF PORT DEVELOPMENT

PORT INDUSTRY IS A COMPLEX INSTALLATION AND THE DEVELOPMENT OF PORTS IS A HIGHLY CAPITAL INTENSIVE BUSINESS; THUS PORT EFFICIENCY IS NOT AN EASY PROBLEM TO BE SOLVED. THE PRINCIPAL DEVELOPMENT STRUCTURES OF A PORT CAN BE CHARACTERIZED BY THE ORGANIZATION OF PORT ACTIVITIES, THE IMPROVEMENT OF PORT OPERATION, GOOD TRANSPORT CONNECTIONS, PROPERFINANCING SYSTEM, TRAINING AND PORT PROJECTING.

4.1.1. ORGANIZATION OF PORT ACTIVITIES

THE ORGANIZATIONAL SET-UPS - I.E. THE ORGANIZATION PLANS,
MANAGERIAL FUNCTIONS, CO-OPERATION AND RELATIONS WITH THE MOST IMPORTANT PORT USERS AND THE RELATIVE EFFECTIVENESS OF THIS CO-OPERATION ARE IMPORTANT FOR EACH PORT ADMINISTRATOR TO KNOW.

IN THIS, A THOROUGH STUDY OF THE LOCAL ORGANIZATION AND RELATED PROCEDURES IS ESSENTIAL WHEN ATTENDING TO OPTIMIZE THE THROUGH-PUT OF AN EXISTING PORT. BY SIMPLY IMPROVING THE PROCEDURES A CONSIDERABLY GAIN IN THE OPERATION OF THE PORT AS A WHOLE CAN OFTEN BE OBTAINED. BUT MANAGEMENT OF THE ORGANIZATIONAL STRUCTURES OF THE PORT IS GENERALLY A VERY COMMON PROBLEM.

THE MAIN PORT ACTIVITIES COULD BE DIVIDED AS FOLLOWS:

* MARINE SERVICES, GENERALLY STATE OPERATED
* TERMINAL SERVICES, OFTEN PRIVATELY OPERATED, BUT MIXED SYSTEMS ARE EMERGING
* PUBLIC SERVICES INCLUDING THOSE OF THE PORT AUTHORITY ITSELF
* AUXILIARY PORT SERVICES, GENERALLY OF LOCAL CHARACTER OPERATED
* OTHER PORT ACTIVITIES, BASICALLY INDUSTRIAL AND TRADING FIRMS OPERATING IN THE PORT AREA; GENERALLY PRIVATELY OWNED AND OPERATED

MOST OF THESE ACTIVITIES ARE CARRIED OUT BY PUBLIC OR SEMI-PUBLIC BODIES, AND GENERALLY THE 5 RELEVANT DEPARTMENTS ORGANIZED FOR THIS PURPOSE IN THE PORT AREA:
* THE ADMINISTRATIVE DEPARTMENT
* THE DEPARTMENT FOR FINANCE AND COMMERCE
* THE OPERATIONAL TRAFFIC AND MARINE DEPARTMENT
* THE ENGINEERING DEPARTMENT
* THE PLANNING, RESEARCH AND PR DEPARTMENT

THE FUNCTIONING OF THIS FORMAL ORGANIZATION IS ENTRUSTED TO THE PORT AUTHORITY WHO FIXES THE PORT OBJECTIVES AND POLICY. TO NATIONALIZE AND TO ACHIEVE THE OPTIMAL FUNCTIONING OF THIS ORGANIZATIONAL STRUCTURE, A MANAGEMENT CONTROL SYSTEM COULD BE APPLIED; SOME BASIC PORT MANAGEMENT PRINCIPLES ARE:

* MANAGEMENT SHOULD FOLLOW STRICT LINES OF JURISDICTION AND POWER
* ALL OFFICERS AND ALSO THE LOWER RANKS SHOULD KNOW THEIR DUTIES AS WELL AS THEIR OPPORTUNITIES FOR AN EXTENSION OF THEIR POWERS,
* THE MOST IMPORTANT DECISIONS ARE TAKEN ON THE BASIS OF LONG TERM CONSIDERATION. SHORT TERM SOLUTIONS ARE GENERALLY GIVEN LITTLE WEIGHT EVEN IF THEY PRODUCE EXTRA INCOMES AND SHORT TERM BENEFITS
* THE MAJOR DECISIONS ARE GENERALLY TAKEN AFTER DUE CONSIDERATION FOR THE WISHES OF THE MAJORITY OF PORT USERS. SPECIAL INTEREST GROUPINGS MAY SUFFER SINCE THE SYSTEM IS GENERALLY LESS FLEXIBLE THAN THOSE OF PRIVATE COMPANIES
* INFORMATION ON BASIC COMMON INTERESTS IS GENERALLY AVAILABLE TO A FAR GREATER EXTENT THAN IS GENERALLY THE CASE
WITH PRIVATE COMPANIES. PEOPLE CAN THEREFORE MAKE PLANS MORE EASILY WITHIN THIS GENERAL FRAMEWORK THAN WITHOUT IT.

* LONG TERM PLANNING IS A WELL-KNOWN TOOL IN PUBLIC ENTITIES. THEREFORE PLANNERS OF ALL KINDS GENERALLY TAKE OR PROPOSE THE MOST RELEVANT DECISIONS

* NEW IDEAS OFTEN TAKE LONG TIME TO BE VARIED OUT IN PRACTICE AND OLD SYSTEMS WILL OFTEN PREVAIL LONG AFTER THAT THEY HAVE CLOSED TO PREVAIL LONG AFTER PRACTICAL USE.

THOSE POTENTIALS OF PORT MANAGEMENT STRATEGIES ARE NOT FIXED RULES; THEY ARE ONLY REFERENCES TO CERTAIN IMPORTANT VIEWPOINTS TO BE FOUND IN SOME WORLD PORTS TODAY.

HOWEVER IT MIGHT ALSO BE NECESSARY TO STRESS THAT THE MANAGEMENT PRINCIPLES OUTLINED ABOVE AND THE COMPLEX PORT ORGANIZATIONAL SET-UPS REQUIRE VERY COMPREHENSIVE CO-OPERATION IN ORDER TO FUNCTION EFFECTIVELY; AN EXTENSIVE ANALYSIS OF THE CONTENT AND QUALITY OF THESE CO-OPERATIVE EFFORTS IS OF PRIMARY IMPORTANCE.


PRINCIPALLY ONE MAY DIVIDE THE ENTITIES OPERATING IN THE
PORT, AND WHOSE EXISTENCE ARE MUTUALLY DEPENDED INTO THE FOLLOWING CATEGORIES:

PORT AUTHORITY, SHIPOWNERS AND THEIR REPRESENTATIVES (SHIP AGENTS), TERMINAL OPERATORS, STEVEDROS AND TRUCKING FIRMS, DOCKERS, FORWARDING AGENTS, THE RAILWAYS, OTHER PUBLICLY OWNED PORT INTERESTS (POLICE, HEALTH, SECURITY, CUSTOM ETC.), GENERAL PORT SERVICES.

ALL THOSE GROUPINGS ARE IMPORTANT IN MAKING THE PORT FUNCTION PROPERLY, AND IN ALLOWING THE PORT TO DEVELOP IN AN ECONOMICAL MANNER. THE DIFFICULTY IS THAT EVEN IF THESE BODIES HAVE ONE AIM IN COMMON, FOR EXAMPLE THE PROPER FUNCTIONING OF THE PORT, WHICH THEY ARE DEPENDENT UPON, THEY HAVE OTHER INTERESTS ALSO, MAY OF WHICH MAY BE DETRIMENTAL TO THE OPTIMAL FUNCTIONING OF THE PORT. IN THIS LATTER SITUATION, BASICALLY IT IS WITHIN THE FUNCTIONS WHICH ARE CONNECTED WITH THE MOVEMENT AND TREATMENT OF CARGOES THAT IT IS IMPORTANT TO CO-OPERATE.

THESE SERVICES ARE: STEVEDORING TERMINAL SERVICES FOR CARGOES, TRUCKING SERVICES, TALLY SERVICES AND WATCHMEN, STORAGE OF CARGOES, TRANSPORT OF CARGOES FROM/TO THE PORT, CUSTOM PROCEDURES, PUBLIC SUPERVISION, ESPECIALLY OF THE SECURITY, REPAIRS AND MAINTENANCE OF EQUIPMENT, SERVICES OF THE ROAD AND RAIL AUTHORITIES.

ALTOGETHER THOSE SERVICES MAKE UP THE FRAMEWORK FOR THE
PROPER FUNCTIONING OF THE PORT WITH REGARD TO THE HANDLING AND CLEARING OF CARGOES. THE MAIN REASON WHY IT IS OF ALMOST IMPORTANCE TO ACHIEVE A CO-OPERATION IS, HOWEVER, AND THAT SEVERAL OF THESE PORT FUNCTIONS ARE MUTUALLY DEPENDENT. ONE FUNCTION CAN OFTEN NOT BE DONE BEFORE THE OTHER HAS BEEN CARRIED OUT. THIS IS PART OF THE REASON WHY SOME PORTS HAVE ESTABLISHED SO-CALLED TERMINAL COMPANIES, WHICH TAKE CARE OF MOST OF IF NOT ALL THESE FUNCTIONS SIMULTANEOUSLY.

4.1.2. IMPROVEMENT OF PORT OPERATIONS

BOTH SEABORNE AND LANDBORNE OPERATIONS INFLUENCE PORT EFFICIENCY; THEY ARE CONCERNED WITH THE DAILY OPERATIONAL SET-UPS IN THE PORT REGARDING THE MOVEMENT OF SHIPS AND THE TREATMENT OF CARGO, THEY INTERACT TO A GREATER OR LESSER EXTENT.

IMPACTS ON SEABORNE OPERATIONS ARE FOR INSTANCE, THE NAUTICAL CONTRAINTS AS ALSO SHIP HANDLING FOR EXAMPLE ENTRANCE, BERTHS ETC. THE REQUIREMENT THAT A SHIP CAN ENTER AND LEAVE THE PORT SAFELY IS AS EQUALLY IMPORTANT TO PORT EFFICIENCY AS THE AVAILABILITY OF BERTHS.

THE CONDITIONS FOR WHICH ENTRY IS CONSIDERED SAFE OR UNSAFE ARE REFERRED TO AS THE PORT ENTRANCE REGIME. IF CONDITIONS ARE UNSAFE FOR A CERTAIN SHIP WHEN SHE WANTS TO ENTER, THIS WILL MEAN THAT SHE HAS TO WAIT FOR MORE FA-
VOURABLE CONDITIONS, WHICH RESULTS IN A LOSS OF VALUABLE WORKING TIME AT THE QUAYS.

ENTRANCE SAFETY IS MOSTLY BASED ON DEPTH (CHANCE OF TOUCHING THE BOTTOM) AND WIDTH (CHANCE OF LOSING CONTROL AND TOUCHING OTHER SHIPS, OBSTRUCTS OR CHANNEL BANKS). IN THIS RESPECT THE NAVIGATIONAL AIDS IN THE APPROACHS AND MANEUVING AREAS ARE OF THE GREATEST IMPORTANCE AND SHOULD BE KEPT IN OPTIMAL WORKING CONDITION. WHEN ONCE THE SHIP ENTERED, SHE MUST FIND AN ADEQUATE BERTH, AVAILABLE WHEN IT IS REQUIRED. TOO FEW BERTHS WILL GIVE RISE TO QUEUES FOR SHIPS AND DELAY IN CARGO DELIVERY. BERTHS WHICH ARE TOO SMALL LIMIT THE MAXIMUM SHIP SIZE, WHICH IN TURN LIMIT THE THROUGHPUT CAPACITY.

INTERACTIONS ON LANDBORNE OPERATIONS ARE CARGO HANDLING, STORAGE AND AVAILABILITY, QUALITY, EFFICIENCY OF PERSONNEL AND EQUIPMENT.'

CARGO HANDLING IS A VITAL ELEMENT IN ANY TRANSPORT CHAIN. CONSIDERING THE PROPORTION OF HANDLING COSTS AND TRANSPORT COSTS, ONE MAY SAY THE HIGHER WILL BE HANDLING AND TRANSPORT COSTS; HANDLING OPERATIONS DEPEND MAINLY UPON TYPES OF CARGO TO BE HANDLED.

WHEN CHOOSING CARGO HANDLING EQUIPMENT THE FOLLOWING FACTORS MUST BE TAKEN INTO ACCOUNT:
* TYPES OF UNITS TO BE HANDLED, CONTAINERS, FLATS, PALLETS ETC.

* TYPES OF HANDLING OPERATIONS REQUIRED

* QUANTITIES OF CARGO I.E. MEMBER OF HANDLING OPERATIONS

* UNIT WEIGHT AND SIZE

* TRANSPORT DISTANCE (WITHIN THE TERMINAL)

* TRANSPORT CONDITIONS (WITHIN THE TERMINAL)

CARGO HANDLING EQUIPMENT REQUIRES IMPORTANT INVESTMENTS; DUE TO THE INVESTMENTS INVOLVED HEAVY HANDLING EQUIPMENT REQUIRES A HIGH DEGREE OF UTILIZATION. WHEN ACQUIRING EQUIPMENT, ITS RELIABILITY OR SERVICE FACTOR SHOULD BE TAKEN INTO ACCOUNT; CAREFUL CONSIDERATION IS ESSENTIAL BEFORE THE FINAL CHOICE IS MADE.

CONCERNING STORAGE, SOME PRINCIPLES FOR ORGANIZATION ARE MENTIONED BELOW.

* AVOID LONG STORAGE TIME

* PROVIDE PROPER TRACKING SYSTEMS. ACCURATE RECORDS MUST BE KEPT ON THE LOCATION OF ALL THE CARGO

* IMPORTANT CARGO SHOULD BE STORED NEAR PLACE OF DELIVERY
* NAME OF VESSEL, LOADING AND DISCHARGING DATE SHOULD BE REGISTERED

* STORE EXPORT CARGO NEAR TO PLACE OF LOADING

* OPEN AIR STORAGE IS SUITABLE FOR COMMODITIES SUCH AS STEEL, PIPES AND HEAVY LIFTS

* CARGO STORED IN THE OPEN WAY BE PROTECTED AGAINST RAIN, SAND ETC.

4.1.3. GOOD TRANSPORT CONNECTIONS TO/FROM THE PORT

ONE MAY SAY THAT THE HINTERLAND IS THE VERY VASIS FOR A PORT'S EXISTENCE. FOR HINTERLAND CONNECTIONS AND HINTERLAND EXPANSION THE PORT IS THEREFORE TO A LARGE DEGREE DEPENDENT UPON ITS TRANSPORTERS, ESPECIALLY THE INLAND TRANSPORTERS. THE MOST IMPORTANT TRANSPORT LINKS CONNECTING THE PORTS WITH THEIR HINTERLANDS ARE THE RAILWAYS, THE ROAD SYSTEM, THE BARGE INLAND WATERWAY SYSTEM AND THE AIRWAYS IN SOME COUNTRIES, BASICALLY ISLANDS AND COUNTRIES HAVING A LONG COASTLINE.

FOR A WELL DESIGNED TRANSPORT CHAIN, THE LAND TRANSPORT SYSTEM MUST BE ADAPTED TO THE SEA TRANSPORT. DIFFERENT KINDS OF FREIGHT REQUIRE DIFFERENT TRANSPORT MODES AS WELL AS
DIFFERENT TRANSPORT SOLUTIONS PER TRANSPORT MODE.

IT IS OF GREAT IMPORTANCE TO STUDY CAREFULLY THE EFFICIENCY OF HINTERLAND CONNECTIONS, TO HAVE A BASIC KNOWLEDGE OF THE CAPACITIES, REGULARITY AND COMPETITIVE STRENGTHS OF THE RESPECTIVE TRANSPORT MODES, PREFERABLY IN CO-OPERATION WITH THE BODIES CONCERNED TO SEE HOW THESE CONNECTIONS ARE HARMONIZED. THE TRANSPORT LINKS ARE BASIC FACTORS IN THE GENERAL COMPETITIVE CONDITION IN A PORT.

TRANSPORT POLITICS ARE ALWAYS OF GREAT IMPORTANCE TO PORTS, BOTH DIRECTLY AND INDIRECTLY. FEW PORTS COULD DEVELOP WITHOUT THE ACCEPTANCE OF THE CENTRAL AND LOCAL TRANSPORT AUTHORITIES, SO IT IS OFTEN VERY USEFUL FOR PORT AUTHORITIES TO INFLUENCE THE TRANSPORT AUTHORITIES IN THE RIGHT DIRECTION.

4.1.4. PROPER PORT FINANCE SYSTEM

A PORT IS PRIMARLY CONCERNED WITH THE FINANCIAL VIABILITY OF ITS OPERATIONS, WHICH MEANS THAT IT SEAKS TO MEET ITS FINANCIAL OBLIGATIONS. ANALYSIS OF THE FINANCIAL SITUATION OF A PORT MUST ENABLE TO EVALUABLE THE FINANCIAL VIABILITY OF THE INVESTMENT AND THE IMPACT OF THE INVESTMENT ON THE FINANCIAL HEALTH OF THE PORT AUTHORITY AS A WHOLE.

IN GENERAL, PORT AUTHORITIES ARE REQUIRED TO GENERATE AND RETAIN SUFFICIENT INCOME TO CARRY OUT EFFICIENT OPERATIONS, TO MAINTAIN THEIR ASSETS IN GOOD WORKING CONDITION AND TO
MAKE A CONTRIBUTION TO FUTURE INVESTMENTS FOR THE PROPER FUNCTIONING AND DEVELOPMENT OF THE PORT.

THE DATA REQUIRED FOR THE FINANCIAL ANALYSIS COME FROM: ESTIMATS OF THE COSTS OF THE PROJECTED FACILITIES, PREVIOUS FINANCIAL STATEMENTS OF THE PORT AUTHORITY, DATA RECORDED BY THE ACCOUNTING SYSTEM, PAST TRAFFICS STATISTICS AND ESTIMATED TRAFFIC FORECASTS, PRESENT TARIFFS OF SERVICES FROM THE PORT AUTHORITY.

FROM THIS INFORMATION, THE FOLLOWING VALUES CAN BE CALCULATED: EXPECTED REVENUE FROM FUTURE TRAFFIC AND TARIFFS, EXPECTED OPERATING COSTS, INVESTMENTS COSTS AND REPAYMENTS, CASH FLOWS, FINANCIAL RATIOS.

TO ACHIEVE ITS FINANCIAL OBJECTIVES A BASIC FACTOR AFFECTING THE FINANCIAL DEVELOPMENT OF THE PORT IS ITS PRICING STRUCTURE. THE PRICING STRUCTURE (NUMBER OF CHARGES, TYPES OF CHARGES, CHARGING BASE) OF A PORT SHOULD BE DESIGNED TO LAST FOR MANY YEARS, ALTHOUGH THE LEVEL OF EACH PORT CHARGE MAY BE MODIFIED AS CONDITIONS CHANGE.

THE PRICING STRUCTURE THEREFORE, SHOULD BE SO DESIGNED AS TO ACHIEVE NOT ONLY PRESENT PRICING OBJECTIVES BUT ALSO FUTURE ONES.

SO A GOOD PRICING STRUCTURE IS NECESSARY; IT SHOULD SATISFY AT LEAST THREE MAIN GENERAL REQUIREMENTS, DIRECTLY DERIVED FROM THE PRICING OBJECTIVES AND CONSTRAINTS. IT SHOULD
ALLOW A PROPER RE-ALLOCATION OF BENEFITS, FACILITATE THE COMPARISON BETWEEN CHARGES AND COSTS AND CONTRIBUTE TO THE IMPROVED UTILIZATION OF ASSETS.

4.1.5. TRAINING OF PORT PERSONNEL

FOR THE EFFECTIVE EFFICIENCY OF A PORT, LABOUR AND KNOW-HOW ARE REQUIRED BESIDES OTHER FACTORS. IN PARTICULAR THE KNOW-HOW ENABLES TO OPTIMISE THE THROUGH-PUT OF GOODS IN THE PORT; AND HERE AN INTERESTING POINT TO BE NOTED:

THE DEEPER THE SPECIALIZATION WITHIN AN ECONOMIC SYSTEM OR THE DEEPER THE SPECIALIZATION IN THE WORLD ECONOMIC SYSTEM, THE MORE GOODS MUST BE DISTRIBUTED, HANDLED AND EXCHANGED. IN THE OTHER HAND THIS INCREASE IN THE HANDLING OF GOODS IS ACHIEVED BY THE MODERN METHODS OF TRANSPORT (NEW EQUIPMENTS OR MACHINS) AND INCREASES THE SPECIALIZATION WITHIN ECONOMIC BRANCHS AND SYSTEMS; THIS MEANS IN CONSEQUENCE NEW SKILLS AND "KNOW-HOW".

IN A PORT THIS REQUIREMENT, TRAINING AND FURTHER TRAINING IS OF PARTICULAR IMPORTANCE. THE SKILL OF PERSONNEL INVOLVED IN PORT OPERATIONS STRONGLY AFFECTS THE FUNCTIONING OF A PORT. AS OUTLINED ABOVE THE EXTENT OF TRAINING TO THE LEVEL OF SKILL REQUIRED AND THE THROUGH-PUT AND/OR EFFICIENCY OF A PORT ARE VERY MUCH INTERRELATED. AND EFFICIENT MAINTENANCE OF PORT INFRASTRUCTURE, EQUIPMENT AND ADEQUATE TOOLS WILL DEPEND ON QUALIFIED AND RESPONSIBLE PERSONNEL.
APPROPRIATE PERMANENT TRAINING FACILITIES SHOULD BE AVAILABLE LOCALLY. TRAINING COURSES ADAPTED TO LOCAL CUSTOMS AND PROCEDURES HAVE TO BE GIVEN TO ALL RELEVANT PERSONNEL AND AT REGULAR INTERVALS.

IN THEORY WHAT IS REQUIRED IS AN "ALLROUND-SPECIALIST" OR "ALLROUND-SKILLED DOCK WORKERS" THAT ARE NOT AS HIGHLY TRAINED AS THE SPECIALISTS BUT ARE USABLE IN A VARIETY OF SKILLED TASKS THUS PROVIDING A FLEXIBLE MULTI PURPOSE UNIT.

THESE ALLROUND SKILLED WORKERS ALSO PROVIDE THE POTENTIAL FOR MANAGEMENT GRADS SUCH AS FOREMAN, SHIPS FOREMAN, SUPERINTENDENT ETC. AND FROM THESE ALLROUND SKILLS A POTENTIAL EXISTS WHICH IS QUICKLY ADAPTABLE TO ANY NEW OR UNKNOWN TASKS.

4.1.6. CONCEPT OF PORT PLANNING

WITHIN THE BROAD NATIONAL STRATEGY, THE DEVELOPMENT OF A PORT MUST BE COMPREHENSIVELY PLANNED. THE DEVELOPMENT OF A PORT CONSISTS OF A COMBINATION OF MEDIUM-TERM AND LONG-TERM PLANNING OF NEW FACILITIES PLUS, IN THE CASE OF AN EXISTING PORT, A PROGRAMME OF SHORT-TERM ACTION TO IMPROVE THE MANAGEMENT, THE PRESENT FACILITIES AND THEIR USE. IN THOSE TWO CASES THE PORT DEVELOPMENT PLANNING COULD SAFELY GO AHEAD WITH THE FOLLOWING OBJECTIVE: TO PROVIDE PORT FACILITIES AND OPERATING SYSTEMS IN THE NATIONAL INTEREST AT THE LOWEST COMBINED COST TO THE PORT AND PORT USERS.

THIS TRADITIONAL FORM OF PORT PLANNING AIMS TO PRODUCE THE BEST PLAN FOR WHATEVER TRAFFIC DEMAND PLACED ON IT WITHOUT TRYING DIRECTLY TO INFLUENCE THE FORM OF THAT DEMAND. NATURALLY ANY PROMOTION ACTIVITY IN FAVOUR OF THE PORT, AND EFFORTS TO ATTRACT TRAFFIC AND INCREASE ITS VOLUME, SHOULD BE TAKEN INTO CONSIDERATION.

BUT PLANNING REQUIRES TOOLS, TIME AND MONEY, AND FEW PORTS WILL HAVE ALL THREE. NO WONDER PLANNING IS AT A PRELIMINARY STAGE. THE FIRST PREREQUISITE IS, HOWEVER, THAT THE MANAGEMENT AND THE HARBOUR BOARD RECOGNIZE THE IMPORTANCE OF PLANNING AND PROVIDE THE BASIC EQUIPMENT AND SOFTWARE; IT WILL NEED CERTAINLY TO EMPLOY PORT PLANNERS, PREFERABLY THROUGH THE ESTABLISHMENT OF A PORT PLANNING DIVISION.
4.2. WHAT CAN A PORT IN A DEVELOPING COUNTRY DO TO PROMOTE ITS DEVELOPMENT?

CASE STUDY: PORT OF COTONOU

Before starting port planning development one must have knowledge of technical, organizational, financial and operational matters combined with detailed knowledge of port facilities, traffic and transportation possibilities; in the case of the Port of Cotonou one has had a good knowledge of what is going on in this port in the previous chapter now some relevant effort should be made to rationalize its operations.

The Port of Cotonou like most of ports in developing countries lacking sufficient capital, expansion having to some extent been difficult, a lack of comprehensive port planning policies has meant poor port services, and other difficulties; in this particular port, the problem which is vitally necessary to solve is to answer to the following realistic question.

4.2.1. CAN THE PORT AUTHORITIES ESTIMATE THEIR POSSIBILITIES OF REACHING THEIR GOALS?

The Port of Cotonou plays an important role in sub-regional trade; according to this vocation and its conditions one will try to define a set of advisable, strategic port objectives and to make some general comments.
* EVERY PORT USER TODAY EXPECTS THAT HIS SHIP AND HIS CARGOES WILL BE HANDLED IN THE BEST POSSIBLE WAY; THE POSSIBILITIES OF ACHIEVING THAT OBJECTIVE WILL DIFFER FOR PORTS IN DEVELOPING AND DEVELOPED COUNTRIES. IN THE CASE OF THE PORT OF COTONOU, IT IS ESSENTIAL THAT THE PORT DOES WHAT IT IS ABLE TO DO WITH THE RESOURCES AVAILABLE AND ALSO SEES TO ITS POSSIBILITIES THAT THE TRAFFIC CALLING THERE IS TREATED IN THE MOST ECONOMICAL AND EFFICIENT MANNER, SO THAT CUSTOMERS ARE GIVEN AT LEAST THE SAME TREATMENT AS IN SIMILAR PORTS. THIS LEVEL OF ADAPTATION GOES NOT ONLY FOR PRODUCTIVITY BUT ALSO FOR ENSURING FOR ITS CUSTOMERS, AND IT IS BELIEVED THAT MOST PORT CUSTOMERS ARE SATISFIED IF THEIR WISHES ON THIS POINT ARE MET.

SO, THE PORT MUST PROMOTE AND SECURE SUFFICIENT MEANS TO SUSTAIN ITS OWN DEVELOPMENT. IT IS, HOWEVER, TRUE TO SAY THAT THIS OBJECTIVE IS BASICALLY PASSIVE IN CHARACTER.

* THE PORT SHALL SEE TO IT THAT THE BUSINESS ENTREPRISES IN THE PORT AREA OR IN THE VICINITY OF THE PORT PROSPER. THE PORT AUTHORITIES MUST TRY TO ANALYSE THEIR PRICING SYSTEM SUCH AS TO REACH THIS GOAL.

* THE PORT SHALL SEE TO IT THAT AS MANY LABOURERS AS POSSIBLE ARE EMPLOYED ON ITS PREMISES. IN DOING SO, IT SHALL NOT INVEST IN THE MOST CAPITAL INTENSIVE EQUIPMENT,
BUT TRY TO CONCENTRATE ON AS MANY MANUAL UNDERTAKINGS AS POSSIBLE.

THIS OBJECTIVE REFERS TO THE PORT’S OBLIGATIONS AS AN EMPLOYER. IT SAYS THAT THE PORT HAS CERTAIN OBLIGATIONS TOWARDS ITS EMPLOYEES REGARDING SAFETY STANDARDS, ECONOMIC CONDITIONS AND ENVIRONMENTAL CONDITIONS. IN THE LONG RUN IT IS ALSO OF PRIME IMPORTANCE TO PORTS AS TO MANY OTHER EMPLOYERS, THAT EMPLOYEES ARE TREATED IN THE BEST POSSIBLE MANNER. MORE CAN THEN BE EXPECTED FROM THE WORK FORCE, AND CUSTOMERS CAN ALSO BE GIVEN BETTER SERVICE. AS A RULE THE PORT WILL WIN MORE BY PROVIDING GOOD WORKING CONDITIONS THAN IT WILL loose THROUGH INCREASED PAYMENTS, SOCIAL BENEFITS ETC.

THE PORT IS AWARE OF THE FACT THAT SUPERFLUOUS LABOUR MUST BE AVOIDED FOR MORE EFFICIENT PORT OPERATIONS.

* THE PORT OF COTONOU IS NOT OVERUTILIZED SO THE PORT SHALL TRY TO ATTRACT MORE SHIPS TO THE PORT AS POSSIBLE.

* THE PORT MUST TRY TO CONCENTRATE ON AS MANY ACTIVITIES AS POSSIBLE. THIS IS IMPORTANT BECAUSE IT CAN THEN MORE EASILY CONTROL ITS OWN USERS, AND BECAUSE MORE ACTIVITY MEANS MORE MONEY.

THAT IS A FACTOR OF THE TENDENCY TOWARDS CENTRALIZATION.
THE GOVERNMENT AND EXECUTIVE BODIES CONTROLLING THE PORT WANT TO CONTROL ALL ITS ACTIVITIES, WHICH MEANS THAT THE SHIP AND FORWARDING AGENTS, EVEN THE SHIPOWNERS OPERATING IN THE PORT, MUST ACCEPT CONSIDERABLE LIMITATIONS UPON THEIR INFLUENCE ON PORT MATTERS. THIS GOAL IS REACHED IN REPUBLIC OF BENIN; BUT BEFORE THIS MEANS A MORE EFFICIENT PORT, BUREAUCRACY AND OTHER BAD PRACTICE MUST CHANGE IN GOOD WAY.

* THE CONCEPT OF CLOSE CO-OPERATION BETWEEN THE PORT AUTHORITY AND ITS MAIN USERS: PROJECT GROUPS CONSISTING OF REPRESENTATIVES FROM THE PORT AUTHORITY AND THEIR MAIN USERS GROUPS MUST BE SET UP MORE OR LESS FORMALLY, SO AS TO BRING THE PARTIES MORE CLOSELY TOGETHER; THE REASON FOR SUCH CO-OPERATION LIES NOT ONLY IN THE AIM OF ACHIEVING MORE RATIONAL SERVICES, BUT ALSO IN A POSSIBLE REDUCTION OF TRAFFIC CONGESTION AROUND THE PORT AND TO SOLVE COMMON PROBLEMS.

* THE LAST OBJECTIVE STRESS ON THE NEED FOR MODERN MANAGEMENT TECHNIQUES; THEY ARE EXTREMELY IMPORTANT IN PLANNING DAILY OPERATIONS, ORGANIZATIONS PROCEDURES ETC. WITH THIS SYSTEM ONLY ONE CAN MEASURE THE RISKS INVOLVED IN THE GREATEST PROJECTS AND THE POSSIBILITIES OF ACHIEVING A BETTER RESULT THAN ASSUMED.

AS ONE CAN SEE THE AIMS LISTED ABOVE ARE DIFFERENT AND IT
IS OBVIOUS THAT THE POSSIBILITIES OF ACHIEVING ONE'S OBJECTIVES WILL DIFFER FOR PORTS. THE PORT OF COTONOU, A PORT IN A DEVELOPING COUNTRY, IS MORE CONCERNED WITH PROFITABILITY AND EMPLOYMENT; IT IS ADVISABLE TO CONCENTRATE ON IMPROVING PORT SERVICES, SO AS TO INCREASE ITS COMPETITIVE ADVANTAGES OVER OTHER PORTS THEN TO ASSIST IN GENERATING TRADE, BUSINESS AND INDUSTRIAL EXPANSION OF THE COUNTRY AND TO PROMOTE REGIONAL ECONOMIC DEVELOPMENT.

4.2.2. A SURVEY OF PORT PROBLEMS
PORT CONGESTION:

CONGESTION OCCURS WHEN THE NUMBER OF SHIPS ENTERING IS LARGER THAN THE THROUGHPUT OF SHIPS IN THE PORT. CONGESTION SEEMS TO BE THE ULTIMATE SYMPTOM OF PORT OPERATIONAL PROBLEMS; THE SYMPTOM REFERRED TO IS ONE OF THE PHYSICAL SIGNS OF CONGESTION AS FOLLOWED:

* EVERY REGULAR STORAGE SPACE IS FULL AND A CONSIDERABLE AMOUNT OF GOODS IS ON THE QUAYS;
* A LONG QUEUE OF SHIPS IS WAITING AT THE ANCHORAGE FOR A BERTH;
* THERE ARE QUEUES OF TRUCKS OR OTHER MEANS OF INLAND TRANSPORT.

SLOW MOVEMENT OF CARGO THROUGH THE PORT IS ONE OF THE MAIN CAUSES OF CONGESTION. THIS MAY BE DUE TO PROCESSING OF DOCUMENTS, EXCESS STORAGE TIME OWING TO LOCAL HABITS, LATE
DELIVERY OF EXPORT CARGO, INEFFICIENT CAPACITY OF TRANSPORT CONNECTIONS ON THE LANDWARD INTERFACE. PORT CONGESTIONS WILL HAVE THE FOLLOWING DIRECT ECONOMIC RESULTS:

* LOSS IN SHIP EARNING CAPACITY, REDUCED INCOME FOR THE PORTS DUE TO REDUCED FLOW AND TO TEMPORARY OR PERMANENT LOSS OF TRAFFIC, HIGH SHIPPING CHARGES FOR THE SHIPPERS;

* INDIRECT COSTS OF DELAYS TO SHIPMENTS AND LOSS OF GOOD-WILL IN THE TRADE.

CAN THE CONGESTION PROBLEM BE SOLVED? THROUGHPUT IN THE PORT CAN BE INCREASED BY PORT EXPANSION, IMPROVED TECHNICAL EQUIPMENT AND METHODS, IMPROVED UTILIZATION OF WAREHOUSES AND STORAGE AREAS, REDUCED STORAGE TIME, OTHER ADMINISTRATIVE MEASURES, CLEARING AND TIDYING UP IN THE PORT.

NATIONAL AND INTERNATIONAL TRAFFIC POLITICS:

TRANSPORT POLITICS ARE OF GREAT IMPORTANCE TO PORTS; THEY SHAPE THE ENVIRONMENT TO WHICH EACH PORT AND TRANSPORT MEDIUM HAS TO ADOPT. UNDER THIS HEADING WE WILL INCLUDE NATIONAL TAXES, TRANSPORT LAWS AND REGULATIONS, SUBSIDIES AND OTHER KINDS OF SPECIAL SUPPORT. SO, IT IS OF NECESSITY TO HAVE A BASIC KNOWLEDGE OF THE CAPACITIES, REGULARITY AND COMPETITIVE STRENGTHS OF THE RESPECTIVE TRANSPORT MODS.

IT IS ACCEPTED THAT THE ROADS SHOULD BE SUBSIDIZED IN AFRICA ESPECIALLY IN BENIN DUE TO THEIR SOCIO-ECONOMIC ADVANTAGES. THESE ADVANTAGES ARE VERY GREAT IN AND AROUND
MAJOR CITIES, EVEN FOR HINTERLAND COUNTRIES, WHICH COULD NOT SURVIVE WITHOUT THE ROADS CARRYING A LARGE SHARE OF THE TRAFFIC.

MAINTENANCE OF EQUIPMENT:
The provision of adequate maintenance is a serious problem particularly in the port of Cotonou. There are few ports in developing countries which have managed to avoid accumulating a permanent pool of equipment awaiting repair. The reactivation of such equipment would give the biggest single gain in performance that management could achieve.

It is extremely important to introduce the idea and necessity of maintenance to all personnel responsible for the use and operation of equipment.

Good maintenance is not cheap, and needs to be considered at the planning stage. Substantial sums need to be provided for workshops, for spare parts, and for ongoing maintenance. This is an extra expense but a necessary investment if the port is to function properly. Without skilled handling and proper maintenance, operations in the port can be seriously affected, and in extreme cases, cause congestion or even complete standstill.

Efficient maintenance will depend on qualified and responsible personnel, training adequate tools and repair faci-
LITIES, ADEQUATE SPARE PORTS.

SO, THE IMPORTANCE OF MAINTENANCE MUST BE STRESSED AND ITS MAIN PURPOSES ARE:
* TO INCREASE THE WORKING LIFE OF THE EQUIPMENT;
* TO PREVENT BREAKDOWNS, THUS ENSURING MORE RELIABLE AND EFFICIENT OPERATIONS;
* TO PREVENT ACCIDENTS.

CONSTRAINTS AND TRADING PRACTICES:
PORT OPERATIONS CAN BE LIMITED OR SLOWED DOWN BY A NUMBER OF CONSTRAINTS, POLITICAL, LEGAL AND OTHER OFFICIAL PROCEDURES.

A REASONABLE DEGREE OF AUTONOMY OF PORT WILL ENCOURAGE INITIATIVE BY THE PORT MANAGEMENT. REGSTRICTIONS TO DEPRESS ANY INITIATIVE ARE KNOWN IN MANY COUNTRIES. SUCH RESTRICTIONS WILL INFLUENCE THE NETIRE ORGANIZATION, THUS TENDING TO REDUCE PRODUCTIVITY. FROM A POLITICAL POINT OF VIEW IT IS THEREFORE IMPORTANT TO ARRIVE AT A PORT'S POLICY WHICH ENCOURAGES EFFICIENT RUNNING OF THE PORT.

THE GOVERNMENT IMPORT AND EXPORT POLICY, LICENCING SYSTEM ETC., POLITICAL RELATIONS WITH OTHER COUNTRIES MAY AFFECT THE PORT ACTIVITIES. DUE TO SPECIAL AGREEMENTS SHIPS OR CARGOES OF SOME COUNTRIES MAY HAVE PREFERENCE IN THE PORT OR SPECIAL LOW STORAGE TARIFF FOR TRANSIT CARGO TO SOME
COUNTRIES ENCOURAGE THE STORAGE OF SUCH CARGO IN THE PORT. LEGAL CONSTRAINTS MAY BE CLOSELY LINKED TO POLITICAL CONSTRAINTS, AS MUCH AS THEY TEND TO LIMIT PORT ACTIVITIES. PARTICULARLY IMPORTANT ARE LEGAL CONSTRAINTS CONNECTED WITH SHIPS CALLING AT THE PORT AND WITH THE OWNERSHIP OF CARGO AND RESPONSIBILITIES FOR THE CASE OF CARGO.

REGARDING OFFICIAL PROCEDURES, THEY ARE RELATED BOTH TO TRADING PRACTICES AND WORKING DISCIPLINE. FOR EXAMPLE, IMPORT CONSIGNMENTS ARE NORMALLY CLEARED FROM THE PORT ONLY WHEN ALL DUTIES AND CHARGES HAVE BEEN PAID, DOCUMENTARY FORMALITIES HAVE BEEN COMPLETED, CUSTOMS CLEARANCE HAS BEEN GIVEN, THE CONSIGNEE WANTS THE GOODS. THUS, IN-ACCURACY IN THESE PRACTICES MAY RESULT IN EVEN SLOWER IMPORT PROCEDURES ON BEHALF OF THE AUTHORITIES.

WORKING DISCIPLINE COULD CONSIST OF REPORTING TO WORK, PUNCTUALITY, ADEQUATE WORK PERFORMANCE, HONESTY. SLACK WORKING DISCIPLINE WILL SERIOUSLY AFFECT THE PRODUCTIVITY DURING WORKING HOURS. THE PORT DEVELOPMENT PLAN SHOULD INCLUDE AS ONE OBJECTIVE THE ENCOURAGEMENT OF BETTER PRACTICE IN ALL THESE MATTERS LISTED. IDEALLY, THE PHYSICAL FLOW OF GOODS SHOULD NEVER SLOWED DOWN BY DELAYS WITH RESPECT TO PAPER WORK; MANAGERS NEED TO BE VIGILANT IN THIS RESPECT.

A ROUTINE ORGANIZATIONAL STUDY OF THE PORT CONSTRAINTS AND
THE FLOW OF DOCUMENTS WILL OFTEN SHOW UP POSSIBILITIES OF IMPROVEMENT AND SUBSTANTIAL SIMPLIFICATION; IT MAY BE ADVISABLE TO ESTABLISH THE MORE USEFUL AND REGULAR CONTROL FUNCTION, PURELY TO AVOID SUCH PRACTICES.
CONCLUSION

ON THE BASIS OF THE ANALYSIS AND INVESTIGATIONS AS CARRIED OUT BEFORE ONE SHOULD MAKE SOLID STATEMENTS AS TO THE MOST ECONOMICAL PORT ORGANIZATION. THE ANSWER WILL VARY ACCORDING TO VARIOUS CONSULTANTS AND FROM PORT TO PORT DEPENDING ON POLITICAL, TECHNICAL, TRAFFICAL AND ECONOMICAL CONDITIONS.

WITH REGARDS TO THE PORT OF COTONOU, FIRST, THE CONTROL OF THE WHOLE RANGE OF ACTIVITIES WITHIN THE PORT IN ONE SINGLE LOCAL AUTHORITY IS WELL APPRECIABLE; THE PORT OPERATIONS HAVE ALREADY THE POWER OF EXECUTION NEEDED, BUT THE PROBLEM IS TO FIND SOLUTIONS AS TO HOW TO CO-OPERATE INSIDE THIS HUGE ORGANIZATION? THE CO-OPERATION BETWEEN ALL PORT OPERATORS HAS TO BE STRENGTHENED.

OTHER ADVISABLE STATEMENT IS RELATED TO THE REGIONAL ECONOMICAL SITUATION ON WHICH THE PORT OF COTONOU DEPENDS ON. THE FACT MUST BE THAT THE GENERAL CULTURE IS APPROPRIATE FOR THE PRIVATE SECTOR TO CARRY OUT TRANSIT FUNCTIONS AND TRANSPORT FUNCTIONS NECESSARY TO THE PORT. ONE SHOULD TRY TO MERGE SOME PRIVATE OPERATING COMPANIES, ESPECIALLY FORWARDING AND TRUCKING FIRMS, IN ORDER TO GET A MORE BUSY, COMPETITIVE AND EFFICIENT PORT. IT IS SUFFICIENT FOR THE PUBLIC BODY TO KEEP AN EYE ON THE SITUATION, TO APPRECIATE WITHIN ITS OWN SPECIFIED TERMS OF REFERENCE AND TO HOPE THAT ALL WILL BE WELL. THE POINT BEING
MADE HERE IS NOT THAT THE PUBLIC SECTOR IS NULL; RATHER IT IS INCOMPATIBLE WITH THE ASPECTS OF INTERNATIONAL BUSINESS CONNECTED TO THOSE PORT OPERATIONS IN THE PORT OF COTONOU AND ITS SURROUNDINGS (HINTERLAND AND NEIGHBOURING COUNTRIES).

FORT THE PORT AUTHORITY, IT NEEDS TO LOOK AT THE OPERATIONS OF THE PORT AS A WHOLE, TO SEE HOW THESE ARE PROGRESSING BY SYSTEMATICALLY COMPARING THEM WITH EARLIER PERIODS, AND AS FAR AS MAY BE POSSIBLE IN THE CIRCUMSTANCES WITH OTHER PORTS IN COMPETITION WITH IT. IT SHOULD ALSO LOOK AT WHETHER ITS OWN TERMS OF REFERENCE ARE ADEQUATE FOR CURRENT AND FUTURE NEEDS; THAT COULD HELP THE PORT TO FULFIL EASILY ITS SUB-REGIONAL VOCATION REQUIREMENTS.
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