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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

APPRAISAL OF

FIRST DOUALA PORT PROJECT

FEDERAL REPUBLIC OF CAMEROON

December 3, 1970

Transportation Projects Department

Currency Equivalents

Currency Unit:

CFA Franc	=	CFAF 1
US$1	=	CFAF 278
CFAF 1	=	US¢0.36
CFAF 1,000,000	=	US$3,600

1 metric ton	=	2,205 lbs.
1 kilometer (km)	=	0.62 mile
1 mile (m)	=	3.28 feet

All depths of water are relative to Mean Low Water Level (MLWL)

Fiscal Year

July 1 to June 30

Abbreviations

OCCR/SOGREAH/DSBI - Organisation, Controle, Conception, Realisation/ Societe Grenobloise d'Etudes et Applications Hydrauliques/Deutsche Societat Beratender Ingenieure

SOGEX - Societe de Gerance et d'Exploitation du Parc a Bois

FEDERAL REPUBLIC OF CAMEROON

APPRAISAL OF FIRST DOUALA PORT PROJECT

Table of Contents

		Page No.
SUMMARY		
1.	INTRODUCTION	1
2.	BACKGROUND	2
	A. The Forest Industry	2
	B. Ports and Internal Navigation	2
3.	PORT FACILITIES, ORGANIZATION AND OPERATIONS	4
	A. Facilities	4
	B. Organization	4
	C. Operations	7
4.	THE PROJECT	9
	A. Description	9
	B. Subsoil Conditions	10
	C. Engineering Consultants Services	10
	D. Cost Estimates	10
	E. Construction and Procurement	11
	F. Future Port Development	12
5.	ECONOMIC EVALUATION	13
	A. Traffic	13
	B. The Industrial Quay	13
	C. Log-Handling Facilities	14
	D. Conclusion	15
6.	FINANCIAL EVALUATION	16
	A. Present Financial Situation	16
	B. Rates and Charges	17
	C. Future Earnings	18
	D. Future Financial Situation	19
7.	RECOMMENDATIONS	22

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ANNEXES

1. The Cameroon Port Study.
2. Extract from Appraisal Report PTR-50a (Railway Project).
3. Existing Port Facilities.
4. Port Directorate-Organizational Chart
5. Draft Terms of Reference - Costing Advisor
6. Douala/Manoka Timber-Handling Study, Terms of Reference.
7. Estimated Schedule of Disbursement.
8. Bases and Assumptions Used in Financial Projections.
9. Douala's Principal Rates and Charges.

TABLES

1. Estimate of Project Cost.
2. Douala - Selected Indicators, 1965-1969.
3. Douala - Import and Export Traffic, 1957-1980.
4. Douala - Estimated Fixed Assets.
5. Douala - Operating Income and Expense Accounts, Fiscal 1965-1975.
6. Douala - Pro Forma Balance Sheets, Fiscal 1965-1975.
7. Douala - Cash Flow, Fiscal 1965-1975.
8. Minor Ports - Operating Income and Expense Accounts, Fiscal 1965-1975.
9. Minor Ports - Net Cash Inflow/Outflow, Fiscal 1965-1975.
10. Minor Ports - Imports and Exports, Fiscal 1965-1975.

MAPS

1. Federal Republic of Cameroon.
2. Layout of Douala Port - the Project.
3. Victoria/Tiko, Douala and Manoka.

FEDERAL REPUBLIC OF CAMEROON

APPRAISAL OF FIRST DOUALA PORT PROJECT

SUMMARY

i. This report appraises a project for developing facilities in the port of Douala. It is designed as an urgent interim solution to provide additional port capacity for the rapidly growing log exports and clinker imports, pending the findings of a French-German group of consultants, OCCR/SOGREAH/DSBI, who are now studying Cameroon's long-term port development needs. The consultants' recommendations will only be available in late 1971.

ii. The project is kept to a minimum so as to avoid conflict with the results of the ongoing studies. It comprises the construction of a quay for imports of industrial raw materials at Douala-Bonaberi and the improvement and expansion of log-handling facilities. Consulting services for project supervision, the introduction of cost accounting and a feasibility study for new solutions of the log-handling problem are included. Total cost of the project is CFAF 778 million (US$2.8 million equivalent). The proposed Credit of US$1.5 million, covering the foreign exchange component of civil engineering works, a small suction cutter dredger and consultants' services, would be made to the Government. Log-handling equipment, which is part of the project and is estimated at about US$0.6 million, will be financed by a new log-handling company.

iii. The project is based on detailed designs made by the consultants referred to in paragraph i. The Directorate of Ports and Navigable Waterways, Ministry of Transport and Communications, will be responsible for the execution. Consultants acceptable to the Association will assist the Government in preparing tender documents, evaluating bids and supervising the construction of the Bonaberi quay. Contracts will be awarded on the basis of Association guidelines.

iv. Port operation and administration is unsatisfactory in various respects. Specific measures designed to remedy some shortcomings in accordance with existing legislation were agreed upon during negotiations, but further organizational reforms should be postponed until the conclusions and recommendations of the ongoing study are available.

v. An effective costing and budgetary control system will be introduced and an asset inventory prepared. During negotiations the Government agreed to accumulate adequate cash resources to meet the local currency costs of expected future port expansion and to improve the efficiency of operations so that operating ratios shall not exceed the rates agreed with the Association.

vi. Log-handling is being reorganized by establishing a new handling company. Draft legal instruments governing the operations of the new company were reviewed during negotiations and are acceptable to the Association.

vii. The proposed project will alleviate current difficulties in expanding industrial production and log exports and will contribute significantly to Cameroon's economic development. Economic benefits are calculated to yield an overall economic return of 24% on the total investment.

viii. The project is suitable for an IDA Credit to the Government of the Federal Republic of Cameroon of US$1.5 million equivalent. Issues on which agreement was reached during negotiations are summarized in Chapter 7.

FEDERAL REPUBLIC OF CAMEROON

APPRAISAL OF FIRST DOUALA PORT PROJECT

1. INTRODUCTION

1.01 Cameroon's port capacity can no longer keep pace with the country's economic development. Increasing congestion of the port of Douala, which handles over 85% of Cameroon's foreign trade, threatens the growth of vital economic activities.

1.02 Because Douala, situated some 30 km from the coast on the Wouri River, has many natural drawbacks and can be further expanded only at considerable expense, the Government appointed a French-German consulting group, OCCR/SOGREAH/DSBI, to undertake an extensive study of alternative port development programs. The consultants' investigations, called the Cameroon Port Study, center around a comparative analysis of port development schemes in Douala and Victoria and will be completed during the second half of 1971. The Association advised the Government on the consultants' terms of reference and indicated its readiness to consider participating in financing the resulting investment program.(for details of the Cameroon Port Study, see Annex 1).

1.03 Recent traffic growth at Douala demonstrated that before a long-term investment program can be implemented, short-term measures are urgently required to keep traffic moving. The Government therefore asked the Association for immediate financial assistance for an interim project at Douala, to consist of constructing an industrial quay at Douala-Bonaberi and expanding the log-handling installations. The total cost of the proposed project is US$2.8 million equivalent and the proposed credit of US$1.5 million equivalent would finance the foreign exchange component of civil engineering works, a small suction cutter dredger and consultants' services and would be made to the Government. The project is kept to a minimum so as to avoid conflict with the results of the ongoing Cameroon Port Study: the industrial quay will be required for the newly-established industrial zone at Bonaberi even if future port developments were to take place in the Victoria region; additional log-handling capacity will be needed in Douala even if the consultants' studies included in the project were to demonstrate the feasibility of installing supplementary log-loading facilities at Manoka, some 20 km downstream from Douala.

1.04 In fiscal 1970, two Bank/IDA operations for the development of Cameroon's transport sector were approved: the First Cameroon Highway Project (180 CM-663 CM), a combined Bank/IDA operation, to improve roads in southern and central Cameroon, and the First Railway Project (687-CM) to provide for the relaying of track on the Douala-Yaounde line and the acquisition of additional rolling stock. The rapidly growing timber traffic is an important aspect of both the First Railway Project and the proposed First Port Project.

1.05 This project was appraised by a mission consisting of Messrs. Fateen (Engineer), Grosdidier de Matons (Port Specialist), Oursin (Economist) and Rodley (Financial Analyst) who visited Cameroon in April 1970.

2. BACKGROUND

2.01 The Federal Republic of Cameroon (Map 1), situated slightly north of the Equator on the west coast of Africa, has about 5.7 million inhabitants and covers an area almost as great as that of France. A description of its economic situation and of its transport sector was given in Chapter 2 of Appraisal Report No. PTR-50a, which was approved by the Board on May 26, 1970 (First Cameroon Railway Project, Loan 687-CM). No relevant changes have occurred since then and the above-mentioned description is therefore repeated in Annex 2 of this report. Details concerning the forest industry and ports and internal navigation, of special importance to this project, are given below.

A. The Forest Industry

2.02 Over the past 15 years, increases in log exports from Cameroon averaged about 10% per year and reached 380,000 tons in 1969. The granting of three million hectares of new logging concessions in eastern Cameroon during the past four years and the opening of the first section of the Trans-Cameroon Railway from Yaounde to Belabo in 1969 are expected to raise exports between 16 and 20% annually over the next five years. By 1975 log exports are expected to reach about 1.1 million tons, of which approximately 80% will be shipped through the port of Douala.

2.03 According to the last Bank Economic Mission to Cameroon, the net standing volume of the 14 most important exploitable timbers is estimated at about 130 million m^3. This large reserve will allow Cameroon to increase its production of logs and timber products for many years.

B. Ports and Internal Navigation (Map 1)

2.04 Traffic through Cameroon's ports from 1966 to 1968 was as follows:

(000 tons)

	1966	1967	1968
Douala	1,173	1,385	1,536
Victoria/Tiko	134	96	105
Kribi	59	62	77
Campo	10	15	30
Garoua	62	-	-
	1,438	1,558	1,748

The figures for Douala include bulk oil traffic which was 231,000 tons in 1968.

2.05 Traffic through Victoria/Tiko is gradually declining in favor of Douala, mainly due to inadequate port facilities and the recent opening of a highway from Douala to Tiko. The lighterage port of Victoria has an almost constant water depth of 10 m but insufficient land for shore facilities. Tiko, which handles mainly bananas, is situated on an estuary 15 km in the interior and, at high tide, accepts ships drawing 6.1 m; it is served only by a narrow gauge railway line.

2.06 Kribi, and the small private port of Campo, are lighterage ports south of Douala used mainly for log exports. Traffic through Kribi is expected to grow with the development of the forestry industry in southern Cameroon and will require some improvements of lighterage and log-handling installations.

2.07 The river port of Garoua, in northern Cameroon, is connected to Niger Delta ports in Nigeria by the Benue-Niger system. The Benue River is only navigable for three months a year and prior to the Nigerian civil war about 50-60,000 tons were handled annually at Garoua. Current traffic is nil. With the expansion of the Trans-Cameroon rail and road system from Douala to Garoua it is doubtful whether the Benue navigation will regain its former importance.

3. PORT FACILITIES, ORGANIZATION AND OPERATIONS

A. Facilities (Maps 2 and 3)

3.01 Douala port is located on the Wouri River, some 30 km upstream from the ocean, and the port's main problem is the insufficient depth of the long navigation channel. At the entrance to the river depths are 13 to 14 m but in places totaling about 9 km, the river is only 5 m deep. At high tide ships of up to 6.5 m draft (3,500 dwt) can use the channel.

3.02 The port has a land area of about 720,000 m^2 of which 130,000 m^2 are allocated to the log-handling depot, 30,000 m^2 are used for sorting and stacking general cargo and 60,000 m^2 for transit sheds. In Bonaberi, part of the port land area was recently allocated fo the future industrial zone leaving a shore belt 90 m wide for port facilities; this is considered adequate.

3.03 The port has eleven deep-water quays at Douala totaling 1,700 m in length and one quay at Bonaberi on the opposite bank, which is used mainly for banana exports and butane gas imports. All quays have an apron of 25 m, two railway lines and at least one row of modern transit sheds which are served by fairly wide roads. The transit sheds can handle about 2 million tons of general cargo annually. An instream petroleum mooring station is under construction and is expected to be completed in mid-1971.

3.04 The Port Directorate owns mobile equipment, mainly for log-handling; floating equipment for pilotage, towing, lifting and dredging; workshops and repair facilities. Further details of port facilities are given in Annex 3.

B. Organization (Chart - Annex 4)

(i) Administration

3.05 Cameroon's Port Directorate is a Department of the Federal Ministry of Transport and Communications. The Director administers all maritime and river ports and is responsible for constructing, maintaining and developing maritime structures and buildings, for conservancy, marine service, navigational aids and dockyard operations.

3.06 In December 1969, Decree 69/531 placed the Directorate under the close administrative and financial control of the Ministries of Transport and Finance in Yaounde by withdrawing the Director's powers to make decisions on contracting, recruitment and discipline of personnel and the granting of concessions and authorizations to port operators. The Director now exercises only delegated powers within limits set by the Ministries; he cannot adequately coordinate the agencies providing port services (Customs, Labor Control Office) and he lacks influence over port users. A consultative board and a standing committee of port users exist, but they have very limited powers and responsibilities and rarely meet. This situation is unsatisfactory.

3.07 The establishment of an autonomous port authority in lieu of the existing departmental structure controlled from Yaounde, would be advisable. The consultative board recently passed a resolution in favor of such an authority and the Association was informed during negotiations that the Government intends to pass the necessary legislation. However, no action is expected before the consultants' findings concerning future port organization become available and during negotiations the Government undertook to consult the Association on any substantial change in the organization of its ports.

3.08 Nevertheless it was agreed that, without preempting the consultants' conclusions and recommendations, limited action to improve organizational arrangements in the port could already be taken in accordance with Decree 69/531. The Government, therefore, undertook during negotiations, to delegate to the port director, not later than April 30, 1971, the powers required for flexible and efficient management of the ports in accordance with sound administrative, financial and engineering practices.

3.09 The position of Port Commander, with responsibility for pilotage, berthing, rendering bills for toll fees, fire-fighting, policing the port, enforcing port regulations and controlling operations, is vacant. Because the police are ineffective at port gates and on the river, pilferage is habitual. During negotiations the Government agreed to appoint a Port Commander as soon as possible.

3.10 The Directorate's staff and labor force at Douala number about 840, over 600 of them employed in three technical service divisions, namely: Works and Maintenance, Workshops, and Equipment and Navigable Waterways (responsible for waterways conservancy). These divisions are considered over-staffed by 15 to 20% and the consultants are studying the problem.

(ii) Budgetary Control and Accounting System

3.11 The annual operating and capital budgets of the Port Directorate are a separate annex of the federal budget. Net operating income does not revert to the federal budget but to a port renewal fund for capital repairs and development. Port accounts are kept by the Directorate on a cash basis. The Treasury receives all monies from port users for rates and charges, and pays all bills on behalf of the port. Mechanical punch card equipment is used for keeping accounts, preparing payrolls, issuing bills to users (other than wharfage bills for cargo which are issued by the Customs Department) and preparing port statistics.

3.12 Day-to-day control of port finances is exercised by a financial comptroller on behalf of the Minister of Finance. No asset inventory is maintained and depreciation is not accounted for. Expenditure is inadequately detailed in the annual report which compares actual with budgeted results. No costing system exists to provide an effective monetary control of port performance and a sound basis for revising rates and charges. A yearly audit is performed by the Treasury but this is not sufficiently effective, as not enough attention is given to variances between budgeted and actual results.

3.13 In view of the ongoing OCCR/SOGREAH/DSBI study and the Government's intention to take action towards granting autonomy after the study is completed, it is premature to impose far-reaching reforms now. Ideally, the port should operate on an accrual accounting basis, record all its assets and liabilities to permit preparation of a balance sheet and have an effective costing and budgetary control system designed on commercial lines, all subject to independent audit. These objectives should be achieved when the port is made autonomous.

3.14 Action now agreed with the Government is confined to improvements which can function in parallel with the present accounting and budgetary system without undue work duplication. A costing and internal budgetary system will be installed to provide a basis for revising rates and charges and a monetary measure of operating performances. Most data would be common to both systems and could be integrated for processing by the Government's computer, due to be installed in Douala in 1971. To achieve these improvements it was agreed during negotiations that the Government engage a costing advisor not later than May 1, 1971, for a period of not less than 18 months under terms of reference and contract satisfactory to the Association. Draft terms of reference are given in Annex 5. In addition, it was agreed that an asset inventory will be prepared by the Port Directorate and that the assets will be realistically valued, residual life estimated and annual depreciation calculated. Completion of the inventory is expected by September 30, 1971.

(iii) The Log Depot

3.15 Until now the port's log depot has been operated by a private company, the Societe de Gerance et d'Exploitation du Parc a Bois (SOGEX) under a Government contract. According to the contract, the Port Directorate provides all investment in fixed and mobile assets and undertakes maintenance. The division of responsibility between SOGEX, in charge of operations, and the Port Directorate in charge of purchasing and maintaining equipment, is unsatisfactory because it does not provide SOGEX with controlling influence over the acquisition of equipment which it must ultimately use.

3.16 Until recently, unloading and sorting operations were handled using slow-moving traveling cranes which led to immobilization of vehicles and slow turnaround of railway wagons. The introduction of log stackers in April 1970 improved operations. Logs are delivered alongside ships by straddle trucks and trailers; deliveries are slow and ship turnaround time consequently affected. In 1969/70 the depot was closed twice for about 15 days because of congestion. Overside loading from barges was recently introduced on a small scale and is expected to improve handling speed.

3.17 Present difficulties in the log depot system stem mainly from the confusion of responsibilities between SOGEX and the Port Directorate. It was therefore agreed during negotiations that a new log-handling company will be established not later than April 30, 1971. The company will have the full and exclusive responsibility for operating the log depot on a sound commercial basis and will own and maintain all mobile equipment. Draft articles of association of the new company and a draft concession agreement, governing the operations of the company in the port of Douala, were reviewed during negotiations and are acceptable to the Association. The Government, represented by the Port Directorate, will exercise control over the performance of the company in its capacity as grantor of the concession but will not interfere with day-to-day operations.

3.18 During negotiations the Association was informed that the Government decided to contribute 35% of the share capital of the new company and that a number of established stevedoring companies have agreed to contribute the balance. The company will finance and procure the mobile and floating log-handling equipment which is included in this project (para. 4.02).

(iv) Bonaberi Industrial Zone

3.19 In view of the fact that the future industrial zone of Bonaberi will be adjacent to the port limits, it was agreed with the Government during negotiations that the Port Directorate will have adequate representation on the Board of Directors of the proposed corporation operating the industrial zone. It was also agreed that the Port Directorate will be consulted before land is allocated for industrial purposes.

C. Operations

(i) Cargo-Handling

3.20 Cargo-handling on ships and/or shore is undertaken by shipping agents and stevedoring companies using their own mobile equipment. Ships are loaded and unloaded using ships' gear. Transit sheds are owned by the Port Directorate and are leased to the stevedoring companies. Consignees collect incoming cargo from the transit sheds and open storage areas, using their own labor.

3.21 Stevedoring of general cargo is satisfactory. Work is on a two-shift, seven-day-a-week basis. In some cases, ships work three shifts, but regular work on this basis is impeded by the inadequacy of port security and the reluctance of labor and some shipping lines to work at night. Shore-handling is hindered by log-loading alongside which causes congestion on the quays. In addition, efficient movement of goods is obstructed because ships are sometimes not berthed facing their agents' sheds. Goods are then transported across the wharf to the proper shed or ships may be moved after cargo-handling has started.

3.22 Sheds and stacking yards are congested, principally because transit areas are used as warehouses. The Port Directorate has not established conditions for use of its sheds and stacking yards but leaves control of operations to lessees and Customs. Penalties for excessive storage are too low to discourage offenders. This situation is unsatisfactory and it was, therefore, agreed during negotiations that the Government will institute, not later than on June 30, 1971 and after consultation with the Association, adequate rules covering the use of storage facilities in the port of Douala-Bonaberi and fixing storage time limits, and penalities for extended storage periods.

(ii) Dredging

3.23 The port owns a cutter suction hopper dredger ("Garoua") capable of dredging up to 2.0 million m^3 annually, operated under a Government contract by a private commercial company with no dredging experience. According to the contract the Port Directorate meets all running expenses, including fuel, labor, maintenance, spare parts and the company's administrative overhead expenses. The contract does not guarantee a minimum output for the dredger and output has always been very low compared to capacity.

3.24 The company can, at its choice and for its own account, use the dredger in any African country for a maximum period of three months annually, in which case it pays the Government an agreed fee per day. In 1969 the dredger worked in Gabon for over three months and was under repair from October 1969 until April 1970. Using the dredger outside Cameroon is unwise since every effort should be directed to dredging Douala channel. The Government realizes the negative consequences of the present situation and undertook during negotiations to have the dredger operated with the efficiency required to ensure adequate dredging of the port and its approaches.

4. THE PROJECT

A. Description (Maps 2 and 3)

4.01 The project, designed to increase Douala's handling capacity of industrial raw materials and logs, consists of:

At Bonaberi:

(i) construction of a new deep-water quay, for handling industrial materials, 200 m long and 8.5 m deep;

(ii) provision of engineering consulting services for supervision of the above work;

At Douala:

(iii) in the log-handling area, construction of a shallow-draft quay for loading logs in barges, 30 m long and 2 m deep, 60 m of sloping concrete aprons for launching floatable logs, the paving of about 20,000 m^2 of roads and timber-stacking areas and shifting an existing overhead crane of 20-ton capacity to the edge of the proposed shallow-draft quay to be used in loading logs on barges;

(iv) dredging about 100,000 m^3 in front of the log-handling area to facilitate movement of barges and floating logs;

(v) installation of buoys for three mooring stations for timber-loading ships;

(vi) acquisition of a small suction cutter dredger to carry out dredging work required in the project and to maintain attained depths;

(vii) provision of consulting services for preparation of tender documents for the dredger;

(viii) a feasibility study for a long-term timber-handling scheme comparing Douala with a proposed alternative site at Manoka;

(ix) provision of a costing advisor; and

(x) mobile and floating log-handling equipment.

4.02 The cost of the mobile and floating log-handling equipment (x) is estimated at CFAF 166 million (US$600,000 equivalent). It will be financed and procured by the new log-handling company. The Government has undertaken to finance the equipment as an integral part of the project should the company be unable to do so.

B. Subsoil Conditions

4.03 Borings made on the site of the new industrial quay indicate layers of sand and gravel mixed with different types of clay. The quay will be of anchored steel sheet piles. No hard strata are located above the dredged depth.

C. Engineering Consultant Services

4.04 Consultants acceptable to the Association will be employed to assist with preparation of tender documents for the dredger, supervision of the industrial quay and to carry out the Douala/Manoka feasibility study (Annex 6). The Government intends to retain OCCR/SOGREAH/DSBI for the Douala/Manoka study, which would be acceptable to the Association.

4.05 Final drawings, tender documents and supervision of civil engineering work for the log-handling facilities will be undertaken by the Port Directorate who are competent to do this work.

D. Cost Estimates

4.06 The total estimated cost of the project, including log-handling equipment, is CFAF 778 million (US$2.8 million equivalent). Cost estimates are based on the consultants' reports and are reasonable. They take into account the known cost of labor, materials and equipment to be imported; 20% is included for contingencies, excluding consulting and advisory services (10% for quantities and 10% for prices). Price contingencies are based on rates of price increases on local and imported goods in recent years. A summary of the estimate follows and Table 1 gives details.

	CFAF Million			US$000			Percentage
	Local	Foreign	Total	Local	Foreign	Total	of Total
Industrial Quay	69.4	205.5	274.9	250	740	990	35
Log-Handling facilities	73.0	59.8	132.8	263	215	478	17
Dredger	7.0	55.6	62.6	25	200	225	8
Douala/Manoka Study	10.0	10.0	20.0	36	36	72	3
Consulting and Advisory Services	5.0	23.4	28.4	18	84	102	4
Contingencies	30.0	62.7	92.7	108	225	333	12
Sub-Total	194.4	417.0	611.4	700	1,500	2,200	79
Long-Handling Equipment (para. 4.02)	-	166.6	166.6	-	600	600	21
Total	194.4	583.6	778.0	700	2,100	2,800	100

An IDA credit of US$1.5 million is proposed to finance the estimated foreign exchange component of all items, excluding the log-handling equipment (para. 4.02). The Government will provide the local currency component estimated at CFAF 194.4 million from the port renewal fund. Retroactive financing will not be required.

E. Construction and Procurement

4.07 The Port Directorate will be responsible for execution of the work. Construction contracts will be awarded on the basis of international competitive bidding in accordance with IDA guidelines. However, the work for the log-handling facilities consists of a number of small items (see Table 1, B) which cannot be grouped to attract international competition and local advertising would therefore, be acceptable.

4.08 Disbursement from the Credit Account would cover the estimated foreign exchange component of 65% for all civil engineering works, the c.i.f. cost of imported equipment (excluding log-handling equipment) and the actual foreign exchange cost of advisory and consulting services.

4.09 Construction is expected to start in mid-1971 and the project should be completed by the end of 1972. Disbursement, excluding log-handling equipment, is expected to be approximately as follows and a further breakdown is given in Annex 7:

	Foreign Exchange	
	CFAF Million	US$000 Equiv.
1971	250	900
1972	167	600
	417	1,500

Since it is normal practice for contractors to submit letters of guarantee in lieu of retention money, the phasing of expenditure does not allow for disbursement of any sums for this purpose after completion of work.

4.10 In addition to expenditure on the project and independent of the consultants' recommendations on long-term development, the port is expected to incur CFAF 1,795 million on other capital works during the six-year period fiscal 1970-1975. About 55% is for new facilities such as a petroleum mooring station and 45% for rehabilitation and replacements, all of which is considered justified. These expenditures will be met from the port renewal fund (para. 3.11).

F. Future Port Development

4.11 The consultants are expected to complete their study of a long-term port development program (Douala/Victoria) in mid-1971. Discussions with them suggest that a complete shift of Cameroon's principal port from Douala to deeper water at Victoria is not expected. The Victoria region's capacity to accommodate a big general cargo port is limited on the landward side, transport facilities are lacking and the costs involved would be very high. The establishment of a new deep-water port there will probably depend largely on the development of a bulk commodity trade, such as bauxite and/or petroleum. After receiving the consultants' recommendations the Government is expected to start a new development program to accommodate the forecast traffic. The program is expected to comprise mainly improvement of depths in the Douala channel, additional berths for general cargo at Douala and a long-term solution for log-loading.

5. ECONOMIC EVALUATION

A. Traffic

5.01 Douala's traffic has grown steadily, from an average of 830,000 tons during the years 1957-1959 to an average of 1,525,000 tons during 1967-1969 (Table 2). The annual increase during this decade averaged 6% and was as high as 12% during the last three years. The composition of imports and exports reflects the country's stage of industrial development: imports of consumer goods, petroleum products and construction materials account for about three-quarters of total imports; exports consist mainly of agricultural products such as logs, coffee, bananas and cotton. Exports of logs are the largest single item and reached 300,000 tons in 1969 (para. 5.09).

5.02 In 1969, about 760 tons of cargo, excluding petroleum products, were handled per meter of quay. Compared with other ports on the African coast (Table 2), and taking into account the heavy rains in Douala for about six months of the year, this figure is satisfactory. Berth occupancy ratio reached 85% in 1968 and over 90% in 1969 and ship waiting time is building up sharply.

5.03 OCCR/SOGREAH/DSBI have made a detailed analysis and forecast of Douala's traffic, broken down into major groups of import and export commodities (Table 3). Beyond 1975, two sets of forecasts, "high" and "low" were presented. After discussions in the field and consideration of actual development since the consultants' forecasts were finalized, the lower traffic forecasts appear more realistic and have been adopted for this appraisal. According to these assumptions, total import and export traffic will grow approximately 11% per year until 1975 and 6% thereafter, mainly as a result of the reduced increase in timber exports. In absolute figures, this means a total traffic volume of 3.1 million tons in 1975 and of 4 million tons in 1980. Most spectacular of all will be the growth in log exports: they are expected to reach 0.9 million tons in 1974. Obviously, this increase in traffic can only materialize if additional port capacity is provided.

B. The Industrial Quay

Use of Facilities

5.04 Two industrial plants are already established in the Bonaberi industrial zone: a veneer factory which started production in April 1970, and a cement factory scheduled to come into operation by the end of 1970, using imported clinker. Land is being reserved for construction of a fertilizer factory expected to start production in 1974. However, because the veneer plant has independent access to the waterfront and the production plan of the fertilizer plant is not yet known, the following economic evaluation of the industrial quay is based on the requirements of the cement factory only. No allowance is being made for using the industrial quay for general cargo traffic. Although increasing congestion on the left bank berths might lead to some transfer of traffic to Bonaberi, this is not expected to become a regular operation in the absence of handling and storage facilities there.

5.05 The cement factory will produce about 130,000 tons of finished product in 1971 and production is expected to reach over 200,000 tons by 1977. The layout of the factory, situated about 100 m from the proposed quay, provides for the mechanical transfer of clinker on conveyor belts directly from the ship to the silos. This equipment cannot be used directly from ships berthed at the adjacent banana quay.

Economic Benefits

5.06 In principle, analysis of the investment should combine construction of the cement factory and the quay. However, construction of the factory and the related handling system is virtually complete. Under these circumstances, the following cost-benefit analysis is based on a comparison of handling costs at the new quay with those at the banana quay as the least expensive alternative.

5.07 This comparison reveals three principal savings from discharging clinker at the proposed industrial quay rather than at the banana quay:

(a) Ship-service time: Unloading productivity will increase from 60 tons/hour to at least 150 tons/hour and ship-service time will be reduced by about four to five ship-days per 10,000 tons of clinker. The cost of a ship-day of this type of bulk carrier is estimated at US$1,000/day.

(b) Handling: The stevedoring rate for clinker using ship's gear is CFAF 350/ton. Savings from using the mechanical equipment are estimated at CFAF 150/ton.

(c) Losses of clinker: Unloading clinker at the banana quay with ship's gear and trucking it to the beginning of the conveyor belt system is estimated to result in clinker loss of 3%. Clinker is presently rated at about CFAF 4,000/ton, cif Douala.

5.08 Calculated over an estimated economic life of at least 20 years for the new quay, these savings are estimated to yield an economic rate of return of 18%. The assumption underlying the above analysis is that the banana quay could handle all banana and clinker traffic without additional ship-waiting time. This is optimistic and leads to an underestimation of the economic benefits of the proposed quay; future use of the new quay by other industrial companies will also add to the economic benefits.

C. Log-Handling Facilities

5.09 Cameroon's logging industry is presently on the verge of a considerable boom. Log exports through Douala increased from about 200,000 tons in 1966 to some 300,000 tons in 1969 and are expected to reach 900,000 tons in 1974. According to the findings of the Bank Economic Mission in early 1970, this volume could be produced and sold without great difficulty. The critical question is whether rail and port capacity are sufficient to handle the increase.

5.10 Most of the logs will continue to be transported to Douala by rail. With the help of the First Cameroon Railway Project, the capacity of the Cameroon Railways is expected to meet requirements until 1975/76. Engineering and economic studies are under way to determine the feasibility of partially realigning the Douala-Yaounde line to adapt its capacity to the Yaounde-Ngaoundere extension.

5.11 The ongoing Cameroon Port Study, supplemented by the feasibility study of the Manoka timber-handling scheme (Annex 6) will determine the most economical solution for loading logs on ocean-going vessels. The investments included in this project will increase log-handling capacity and efficiency in the port of Douala and will bridge the gap until a new scheme can be implemented at Douala or Manoka.

5.12 It is assumed that some 85% of total log exports through Douala will be handled by the port's installations and that, after a transition period, about 60% of this volume will be floatable timber. Based on comparable conditions in Abidjan, the proposed investment is expected to result in the following development of handling costs:

(a) Loading of non-floatable logs from barges rather than from the quay: no reduction in handling costs.

(b) Loading of floatable logs directly from the water rather than from the quay: reduction of at least 300 CFAF/ton in handling costs.

Calculated over an average eight-year economic life of the new assets for an annual handling capacity of up to 800,000 tons, the cost reductions will yield an economic rate of return of about 35% on the total investment.

5.13 This economic rate of return does not cover all economic benefits of the proposed project. Loading logs from the water rather than from the quays will facilitate the flow of general cargo between ships and sheds and thus increase port productivity. Withdrawing 350,000 tons of logs or more from the general cargo berths will also enable the port to handle traffic increases until the long-term development program can be implemented in about 1974/75.

D. Conclusion

5.14 Both components of the project are well justified and are of first priority for the development of the port of Douala. The overall economic rate of return on the whole project is estimated at 24%.

6. FINANCIAL EVALUATION

A. Present Financial Situation

6.01 Using the bases and assumptions listed in Annex 8 and a fixed asset inventory prepared by the Association (Table 4), the earnings and financial situation of Douala port in fiscal 1969 and the preceding three years are summarized below. As the major assets, apart from land, were procured during the last seven years and original costs are known in most cases, the inventory is considered sufficiently reliable for broad financial evaluation purposes. Detailed income and expenses and pro forma balance sheets are shown in Tables 5 and 6 respectively.

(CFAF Million)

Income and Expenses	1966		1967		1968		1969
Operating Income		730		795		798	1,061
Operating Expenses	445		482		498		533
Depreciation	256	701	259	741	269	767	269 802
Net Operating Income		29		54		31	259
Interest Expenses		33		33		34	33
Net Income (Loss)		(4)		21		(3)	226
Times Interest Covered		0.9x		1.6x		0.9x	7.8x
Total Debt Service		24		24		38	38
Times Debt Service Covered		12x		13x		8x	13x
Operating Ratio		96%		93%		96%	76%
Assets							
Net Fixed Assets in use after Depreciation		5,532		5,554		5,285	5,107
Capital Work in Progress		131		-		7	96
Total Net Fixed Assets		5,663		5,554		5,292	5,203
Cash at State Bank (Port Renewal Fund)		234		245		516	714
Other Current Assets (less current liabilities)		57		58		56	68
Total Assets		5,954		5,857		5,864	5,985
Liabilities							
Equity		5,005		5,026		5,023	5,250
Less Subsidization of Minor Ports		4		131		117	218
Total Equity		5,001		4,895		4,906	5,032
Long-Term Debts		953		962		958	953
Total Liabilities		5,954		5,857		5,864	5,985

	1966	1967	1968	1969
Debt/Equity Ratio	16/84	16/84	16/84	16/84
Financial Rate of Return on Net Fixed Assets in Use	0.5%	0.9%	0.5%	5.0%

6.02 Between fiscal 1965 and 1968 Douala barely broke even. The return on net fixed assets in use was less than 1% and the operating ratio exceeded 90%. A principal cause of these poor results was overstaffing (para. 3.10). However in the same period, cash resources, which are held by the Government in the port renewal fund, increased from CFAF 166 million to CFAF 516 million. The fund represents the cash resources of Douala and the three minor ports of Kribi, Victoria/Tiko and Garoua. Withdrawals by any port are not limited to individual contributions to the fund. Consequently, to finance capital investments during this period, the minor ports withdrew CFAF 117 million more than their joint contributions of cash resources, mainly to purchase port installations at Victoria from the Cameroon Development Corporation (see para. 6.15). Despite this, the fund rose because Douala's capital expenditure was much lower than its cash generation.

6.03 In 1969, increased activity at Douala substantially improved results to yield a net income of CFAF 226 million, reduce the operating ratio to 76%, raise the return on net fixed assets to 5%, and the port renewal fund by CFAF 198 million to CFAF 714 million. The year therefore closed with Douala in a sound financial position although the rate of return is lower and the operating ratio higher than can be expected from tariff levels in operation.

B. Rates and Charges

6.04 Douala's rates (Annex 9), which do not include cargo-handling since this function is performed by private companies, have remained largely unaltered since 1963. Compared with other similar West African ports, overall rates are high.

6.05 Rates can be altered by Presidential Decree. Present wharf landing rates for import cargo are levied according to a commodity code which classifies over 1,500 items into nine rate categories. There appears to be no justification for such a complex rate structure (with, for example, biscuits, dynamos, electrodes and tricycles in one category while bicycles, eggs, tinned milk and locomotives fall in another and cheaper category). A simple, more easily applied structure should be devised. The basis of charging for work performed in the port's workshops was last related to costs over 10 years ago; subsequently, rule

of thumb methods have been used to take account of cost increases. The cost advisor to be appointed will assist in introducing a costing system which will enable future rates and charges to be reasonably based upon costs.

C. Future Earnings

6.06 Based upon traffic projections and on the current rates and charges (Annex 9), the estimated results during the next six fiscal years 1970-1975 are summarized below, with 1969 figures shown for comparison. Detailed forecasts are in Table 5. Bases and assumptions used are in Annex 8.

	Actual		Forecast				
	1969	1970	1971	1972	1973	1974	1975
Operating Income	1,061	1,080	1,130	1,211	1,290	1,377	1,471
Operating Expenses	533	614	652	683	708	740	776
Depreciation	269	273	284	292	323	338	351
Total Operating Expenses	802	887	936	975	1,031	1,078	1,127
Net Operating Income	259	193	194	236	259	299	344
Interest Expenses	33	33	36	52	63	62	61
Net Income	226	160	158	184	196	237	283
Times Interest Covered	7.8x	5.8x	5.4x	4.4x	4.0x	4.8x	5.7x
Total Debt Service	38.0	38.0	41.0	57.0	87.0	93.0	93.0
Times Debt Service Covered	13.1x	12.2x	11.6x	9.3x	6.7x	6.9x	7.5x
Operating Ratio	76%	82%	83%	81%	80%	78%	77%
Financial Rate of Return on Net Fixed Assets in use (as valued by Association)	5.0%	3.7%	3.7%	4.6%	4.7%	5.4%	6.2%

6.07 Despite a steady rise in income during the period, the operating ratio is expected to deteriorate slightly. Labor costs are again the main problem. Besides general pay increases and annual increments, the Directorate is overstaffed and staff costs (exclusive of private stevedoring and wharf labor) are more than 50% of total expenditure (excluding depreciation) which is excessive. Unless remedial action is taken the operating ratio will remain higher than 80% until 1974. However, it is hoped that the consultants' study due at the end of 1971 will provide a solution for better use of fewer employees.

6.08 A further problem is the cost of maintaining the Maritime Service Division which performs port clearance duties, registration of local ships and seamen, annual and safety inspection of ships and the training and examination of seafarers, which far exceeds the income derived from related charges. Costs almost trebled between 1966 and 1970. By 1975 direct costs are expected to total CFAF 51 million and yield income of only CFAF 8.4 million. Such services are rarely self-supporting and in most countries the net cost is met out of the state's fiscal budget. Should these services continue to be performed by the port authority when given autonomy, they should be suitably reimbursed annually by the Government.

6.09 To ensure a reasonable rate of return without increasing tariffs which are already high, costs must be controlled and overstaffing avoided. To this end the Government undertook to improve efficiency so that operating ratios shall not exceed 80%, 78%, 76%, and 74% in the years beginning July 1, 1971, 1972, 1973 and 1974 respectively, such ratios to be suitably adjusted in agreement with the Association upon completion of the costing advisor's assignment. The Association will be consulted prior to any modification of port charges.

6.10 The financial rate of return on net fixed assets in use (as valued by the Association) falls to 3.7% in 1970/71 but recovers to 6.2% in 1975 when a high utilization level of the new facilities provided by the project will be attained. This should increase to 7.0% if the operating ratio is improved as recommended. Until the asset inventory is completed it is inappropriate to negotiate a rate of return on net fixed assets in use. This would, however, be required if a further loan is negotiated to finance more extensive port development.

6.11 Debt service coverage is not expected to fall below 6.7x and is adequate.

D. Future Financial Situation

6.12 Considerable cash resources will be required around 1974/75 to meet capital expenditure arising from the implementation of long-term development plans now in preparation.

6.13 Pro forma balance sheets and projected cash flow for the period fiscal 1970-1975 are given in Tables 6 and 7 respectively and show a generally satisfactory position. They are summarized below:

Pro Forma Balance Sheets as of June 30
(CFAF Million)

	1970	1971	1972	1973	1974	1975
ASSETS						
Total Net Fixed Assets	5,395	5,627	5,788	5,704	5,666	5,665
Cash at State Bank	346	343	635	963	1,148	1,399
Other Working Capital	69	67	73	75	78	84
Total Assets	5,810	6,037	6,496	6,742	6,892	7,148
LIABILITIES						
Total Equity	4,862	5,022	5,211	5,411	5,592	5,881
Long-Term Debts	948	1,015	1,285	1,331	1,300	1,267
Total Liabilities	5,810	6,037	6,496	6,742	6,892	7,148
Debt/Equity Ratio	19/81	20/80	25/75	25/75	23/77	22/78

Cash Flow - Fiscal Years
(CFAF Million)

	During Project 1970/71 - 1972/73		%	Post Project 1973/74 - 1974/75	
Cash Required					
Capital Investment - Project		578.2	48		-
Other		609.1	50		650.0
		1,187.3	98		650.0
Technical Assistance under Project		20.0	2		-
Total		1,207.3	100		650.0
Cash Available					
Net Operating Income		689.7			642.4
Depreciation		898.8			688.7
		1,588.5			1,331.1
Less Debt Service	185.0	-		186.0	
Less Working Capital Changes	6.5	191.5		9.0	195.0
Net Internal Generated Cash (Douala)		1,397.0			1,136.1
Cash at beginning of period	346.5	-		963.5	
Cash from (to) Minor Ports	10.3			(50.2)	
Cash at end of period	(963.5)	(606.7)		(1,399.4)	(486.1)
Internal Generated Cash used for Capital Investment		790.3	66		650.0
Association Credit		417.0	34		-
Total		1,207.3	100		650.0

6.14 The port renewal fund is expected to rise to CFAF 1,148 million by 1974 and CFAF 1,399 million by 1975. The fund's growth depends upon two factors, besides Douala's level of net income. Firstly, there are withdrawals by the Government. At the end of 1969, CFAF 345 million considered no longer required for capital investment in the ports was withdrawn. Because of Douala's needs, no further withdrawal will be possible before 1975. Secondly, the minor ports of Kribi, Victoria/Tiko and Garoua draw from the fund: it is assumed that net drawings between 1970 and 1975 will not exceed CFAF 25 million. To establish this figure it has been necessary to calculate the financial effect of operations in the minor ports. Table 8 shows actual and forecast operating income and expenses in fiscal 1965 to 1975. Table 9 gives the contributions to and withdrawals from the port renewal fund during the same period, while Table 10 gives actual and forecast traffic through Kribi and Victoria/Tiko on which the financial projections are based. Garoua is now inactive and its future uncertain.

6.15 The capital expenditure of the minor ports during fiscal 1965-1969 exceeded their total net income by CFAF 218 million. However, this pattern is not expected to continue because the heavy expenditure for Victoria/Tiko resulted primarily from the purchase of port installations from the Cameroon Development Corporation. Victoria/Tiko traffic is decreasing and substantial investment there will not be required unless Victoria is selected for new deep-water port development (para. 6.11). Apart from works recommended by the consultants to improve access to the lighterage basin, further large capital expenditure in Kribi will only be required if timber traffic increases substantially. No capital expenditure is forecast for Garoua. The Government agreed during negotiations to take all measures possible to ensure equilibrium in the account's related to the operation of the ports of Garoua, Kribi and Victoria/Tiko.

6.16 To ensure that adequate cash resources are available to meet local currency costs of major port expansion expected to be required in the near future, the Government undertook to maintain a sound financial situation in accordance with accepted financial practices and, by June 30, 1974, accumulate cash resources representing the balance of the port renewal fund of not less than CFAF 1,000 million. The funds so accumulated may be used prior to 1974 for major expansion works established in consultation with the Association.

7. RECOMMENDATIONS

7.01 During negotiations, agreement was obtained on the following principal points:

(a) consultation with the Association on any substantial change in the organization of Cameroon's ports (para. 3.07);

(b) delegation to the port director of the powers required for flexible and efficient port management in accordance with sound administrative, financial and engineering practices not later than April 30, 1971 (para. 3.08);

(c) establishment of a new log-handling company not later than April 30, 1971 (para. 3.17);

(d) operation of the dredger "Garoua" with the efficiency required to ensure adequate dredging of the port and its approaches (para. 3.24);

(e) improvement of port operating efficiency so that operating ratios will not exceed agreed rates, and consultation with the Association prior to modification of port charges (para. 6.09); and

(f) accumulation of adequate cash resources to meet local currency costs of major port expansion expected in the near future (para. 6.16).

7.02 The proposed project is suitable for an IDA credit of US$1.5 million equivalent.

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

The Cameroon Port Study
(Study of a Long-Term Port Development Program)

1. Because of the steadily increasing traffic at Douala and the difficulties encountered in maintaining adequate depths in the channel, the Government employed a group of consulting engineers, OCCR/SOGREAH/DSBI, in January 1969 to carry out a feasibility study of long-term port development program in Cameroon. At the Bank's recommendation, the consultants' terms of reference were amended in October 1969. The main item of the study is the feasibility of developing Douala port as compared to constructing a new deep-water port at Victoria, Ambas Bay (Map 3). Completion of the study is scheduled for September 1971; however, conclusive results are expected by March 1971.

2. The consultants' assignment includes:

(a) a study of short-term development projects, namely:

(i) a new industrial quay at Bonaberi, improving handling equipment at Douala, Victoria and Tiko, and improving Kribi and Garoua ports.

(b) a study of long-term development projects, namely:

(i) an economic study to justify the need for major port development;

(ii) a model study and site investigations for Douala channel;

(iii) site investigations for the Victoria zone;

(iv) comparison of possible development projects;

(v) technical and economic study of the recommended project;

(vi) a financial analysis of the existing and new port facilities; and

(vii) a study of the organizational problems of Cameroon ports.

3. The consultants have completed the following work:

(a) Traffic study, the estimation of the actual and potential capacity of the existing ports and the global needs for new facilities;

(b) site measurements and analysis of data in the Douala channel, at Kribi and Victoria;

(c) a program for the mathematical model study;

(d) a study for improving handling equipment in Douala, Victoria and Tiko, including timber handling;

(e) tender documents for the industrial quay at Bonaberi including specifications, bill of quantities and drawings; and

(f) a study for improving Kribi port.

4. The following is work to be completed by the consultants and expected dates of completion:

(a) Garoua port study - August 1970;

(b) model study of Douala channel - October 1970;

(c) evaluation of alternative projects - March 1971;

(d) economic and financial study of recommended project - July 1971;

(e) organizational study - August 1971;

(f) general report - September 1971;

(g) tender documents for Phase 1 of the recommended project - November 1971.

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Extract from Appraisal Report PTR-50a, dated May 12, 1970 for a Railway Project (Loan No. 687-CM).

2. BACKGROUND

A. Economic Setting

(i) The Country (See Map 3)

2.01 The Federal Republic of Cameroon, formed in October 1961, comprises the part of Cameroon previously under French mandate and the southern part of the former British Cameroons. It is situated slightly north of the equator on the west coast of Africa and covers an area of 475,000 km^2, almost as great as that of France. The coastal and southern areas are suitable for tropical crops such as coffee, cocoa, palm oil, rubber and bananas. Tropical rain forest spreads over 150,000 km^2 within the southern half of the country. In the north conditions are suitable for cultivation of cotton, groundnuts, rice and other cereals. Between these areas lies a sparsely populated high plateau with good grazing potential. Population (about 5.7 million) is growing at about 2.2% per annum; it is concentrated in the coastal southwest in which is situated the economic capital of Douala, in the north, and around Yaounde, the administrative capital.

(ii) Economy

2.02 About three-quarters of the working population are engaged in agriculture, predominantly on a smallholder basis. There are a few large plantations, mainly in West Cameroon. Prices for cocoa and coffee are established through a stabilization fund, operated by a governmental marketing board. Apart from a bauxite deposit near Ngaoundere, the country has few known minerals and few manufacturing industries, a notable exception being an aluminum plant at Edea, which converts alumina imported from Guinea into aluminum ingots for export and for the manufacture of roofing sheets and household goods for the local market. Development efforts have been focused mainly on increasing agricultural production and special emphasis has recently been placed on the expansion of timber logging. Buoyant prices for Cameroon's main exports on the world market have permitted imports in recent years to advance in quantity faster than exports without detriment to the balance of payment. Foreign trade accounts for about 40%* of gross domestic product (GDP) which now represents per capita about US$175** per annum and is growing at an annual rate of 6.5% at constant prices. Cameroon is a member of UDEAC (Union Douaniere et Economique de l'Afrique Centrale), which includes also Central African Republic, Gabon and Congo (B).

2.03 Cameroon is well placed for handling foreign trade in transit for Chad and the Central African Republic (CAR). In normal times Chad can also use the Nigerian Railway from Maiduguri to Lagos or the Benue and Niger

* up-dating by Economic Mission, May 1970: 45%
** up-dating by Economic Mission, May 1970: US$145

Rivers to Burutu, but at present neither of these routes has recovered from the effect of the recent hostilities. The CAR can use the trans-equatorial routes to Bangui, the Oubangui and Congo Rivers to Brazzaville and the Congo Ocean Railway to Pointe Noire. However, lower transport costs in Cameroon, resulting from rail and road improvements and construction of the Trans-Cameroon Railway, should attract additional traffic to the Trans-Cameroon route. The construction of a possible railway line from Yaounde to Yokadouma as a first section of the railway connection to Bangui (CAR) has been recommended by consultants who are making a CAR-Cameroon Regional Transport Survey financed by UNDP with the Bank as executing agency. If justified, this project would open new territories to development in Cameroon and CAR and provide another access to the sea from CAR.

(iii) Timber

2.04 (Deleted; see Chapter 2)

B. Transport System

2.05 The transport system of the country is highly oriented toward external trade. It serves mainly to export agricultural products and bring in imports of consumer goods, raw materials, and capital goods for productive investment. From the various transport projects planned, it appears that Cameroon will continue to invest heavily in its infrastructure during the third five-year Development Plan (1971/72 - 1975/76)[1/]. For the second Plan (1966/67 - 1970/71), public and private investment in roads, ports, railways and motor transport amounted to 33% of a total investment of 165 billion CFAF (US$595 million).

(i) Railway

2.06 The railway network consists of two main lines originating at Douala: (a) the northern line to Nkongsamba (172 km) with a branch from Mbanga to Kumba (29 km) in West Cameroon; (b) the central line to Yaounde (308 km) with a branch from Otele to Mbalmayo (37 km). A 628-km extension from Yaounde northward towards Ngaoundere, known as the Trans-Cameroon Railway, is under construction. It was opened to traffic to Belabo (293 km) in April 1969, and the remaining 335 km to Ngaoundere will probably be ready for use in 1974. The system, which is publicly owned and operated by Regifercam, will be more fully described later in this report. Annex 1 presents a historical review of railway development in Cameroon.

1/ The Railway Development Plan is for the six years 1970/71 to 1975/76, beginning one year earlier than the Government Plan. This deviation from the normal five-year planning period has been made necessary by unforeseen increases in traffic, accelerated wear and tear of track and the threatened failure of the Japoma bridge.

2.07 The railway carries over two-thirds of all traffic into and out of Douala port. The increase in timber traffic in recent years has been made possible only by the availability of cheap railway transport; future targets of greatly increased production from areas more distant from the port will depend even more heavily on this factor. In the past, the developmental potential of the railway has been limited to a relatively small area, its farthest penetration of the hinterland being to Yaounde, a distance of only 308 km from the coast. The productive regions of northern Cameroon and southern Chad have been isolated from their natural outlet to the sea by distance and high transport costs, and economic development of these regions has depended upon the capacity of alternative and cheaper rail and river routes through Nigeria. These alternative routes, for a variety of reasons, have always been inadequate and unreliable with the result that the development of a large area of high potential has been retarded. When the extension of the Cameroon Railways to Ngaoundere has been completed and the roads northward from the railhead have been improved (for which purpose Bank and IDA finance has already been made available), a new and powerful incentive to development will be provided.

(ii) Roads

2.08 The direction of the main national roads is from the coast, at Douala, to the northern part of the country. A main axis connects Douala to Nkongsamba and to Ngaoundere where it converges with a road from Yaounde to continue toward the north up to Chad. The total length of the road network is about 20,700 km, 17,500 km in East Cameroon and 3,200 km in West Cameroon. Only 1,200 km are paved, about 10,000 km have gravel or laterite surfaces with various standards and traffic densities, and 9,500 km are earth tracks with vehicle counts lower than 10 per day. The vehicle fleet numbers about 30,000 in East Cameroon and 6,500 in West Cameroon. The distribution by type is about 20% trucks, 19% light delivery vans, 52% passenger cars and 9% motorcycles. The overall road network and its maintenance are in need of improvement. Development forest roads are being planned in the southwest. A Bank loan of US$12 million and IDA Credit of US$7 million were approved in February 1970 for improvement of the Ngaoundere-Garoua and Tiko-Victoria roads.

(iii) Ports and Internal Navigation

2.09-2.11 (Deleted; See Chapter 2)

(iv) Aviation

2.11 International air service is provided by UTA (Union de Transports Aeriens) and by Air Afrique through Douala. Connecting services are provided by Air Afrique and a number of small companies to Yaounde, Tiko, Ngaoundere, Garoua, Maroua, Foumbam, Kribi, Yagoua and Batouri. There are 15 flights per week in each direction between Yaounde and Douala. Air freight is limited to high value goods and perishables, and is minimal in comparison to total freight traffic.

C. Transport Policy and Coordination

2.13 At present, railway transport, ports and civil aviation are regulated by the Federal Ministry of Transport and Telecommunications whereas road matters, construction, maintenance, road transport licenses and tariffs come under the jurisdiction of the Department of Public Works at the Federated States level. No Federal Ministry has full responsibility for the coordination of various transport modes, investment priorities, highway and bridge construction standards, collection of compatible and reliable transport statistics and vehicle registration.

2.14 There appears to be no legislative protection of transport modes from one another. The limitation of gross vehicle weight to five tons on the road between Edéa and Yaounde, for reasons of low standards of construction, works in favor of the railway, but with the exception of the Douala to Nkongsamba section, where road/rail competition does exist, the two modes are generally complementary.

2.15 During negotiations of the recent highway development credit agreement, assurances were obtained that the Cameroon Government will study the appropriate institutional modifications to ensure the coordination and the strengthening at the federal level of all measures related to the transport sector. During negotiations of the proposed loan, assurances were obtained that the railway will introduce, not later than July 1, 1971, a costing system to determine marginal profitability by lines and commodities and thus provide a basis for a pricing policy appropriate to operations in the increasingly competitive environment that is inevitable as the economy develops.

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Existing Port Facilities

1. Douala port, on the Wouri River, is 30 km from the ocean (Maps 2 and 3).

A. The Channel

2. The main drawback to the port is the limitation of draft in the navigation channel. Depths at the entrance of the river are 13 to 14 m whereas about 9 km of the channel leading to the port facilities are relatively shallow; these were dredged to a depth of 4.2 m in 1947 and to a depth of 5.7 m in 1952. Maintaining the latter depth in this part of the channel by occasional dredging has proved very difficult because siltation of improved depths is rapid; the minimum depth now is about 5 m. Maximum tidal range is 2.5 m and mean tidal range is 1.5 m; consequently, ships of up to 6.5 m draft can use the channel at high tide. About five kilometers of the channel are 5 to 6 m deep, 6 km are between 6 to 8 m deep and 19 km are over 8 m deep. Minimum width of the channel is 150 m. The channel is stable and has no difficult bends.

3. A 7.0 m deep bar in the open sea 15 km from the river entrance allows ships of 8.5 to 9.0 m draft to pass during high tides. The bar was surveyed in 1956 and 1962 and was found to be stable in position and depth. Any future deepening of the channel should allow for the depth of this bar.

B. The Wharves

4. Douala port has 11 deep-water quays, all in line on the left bank of the river. Four quays 550 m long and 8 to 10 m deep, of steel sheet piles, were completed in 1964; the others were built in 1954 of concrete blocks and are 1,150 m long and 5 to 8 m deep. In addition, there are some 60 m of shallow quays for floating equipment, 165 m for fishing boats and 1,330 m for small vessels and harbor craft.

5. Of the 11 main quays only one is specialized. It is used for importing alumina and exporting aluminum ingots. The same quay is also used for tankers discharging petroleum products into a pipeline leading to storage tanks. The other deep-water quays are for timber, general cargo and dry bulk cargo; all have an apron of 25 m, two railway lines, at least one row of modern transit sheds and are provided with fairly wide roads and ample areas for parking and maneuvering road vehicles.

6. In March 1970, the Government contracted with H. Courbot (French) to construct a petroleum mooring station 200 m from the fishing quays, at a cost of CFAF 145 million (US$0.52 million equivalent). The structure, of two steel dolphins, can accommodate tankers of 8 m draft. Work is expected to start in mid-1970 and be completed in a year. The petroleum companies will finance construction of the platform for cranes and flexible hoses and the submerged pipelines; the estimated cost is CFAF 40 million (US$0.15 million equivalent).

7. Bonaberi is opposite Douala, on the right bank of the Wouri River. A railway and a road bridge connect the river banks upstream to Douala. Bonaberi has one quay 140 m long and 7.5 m deep for exporting bananas, and a shallow-draft quay 70 m long for barges.

C. Transit Sheds - Sorting Areas

8. In Douala, the port land area is 3,600 m long and 100 to 200 m wide. It contains 15 transit sheds for general cargo with a total area of about 55,000 m^2 and average dimensions of 40 x 100 m x 6 m. All sheds open at both sides, are served by railway lines, paved by concrete slabs and can accommodate loads of 2 tons per m^2. Shed area is sufficient for handling traffic of about 2 million tons of general cargo annually; the forecast general cargo traffic for 1975 is 1.4 million tons.

9. Total area for sorting and stacking is about 30,000 m^2 for general cargo and 130,000 m^2 for timber. These areas are generally flooded with water during the rainy season and the lower layer of goods is often damaged.

D. Handling Equipment

10. For Timber:

(a) Six overhead cranes, 9 m high, two 20-ton and four 10-ton, on rails 170 m long and 25 m apart; forward speed 30 m/mn and lifting speed 5 m/mn. One crane is new and the other five purchased in 1954. The foundation is unstable and rails require occasional realignment and leveling;

(b) One overhead crane, purchased in 1969, of 20-ton capacity on rails 280 m long and 44 m gauge; forward speed 60 m/mn and lifting speed 6 m/mn. This crane offers very limited service mainly because of its unsuitable position in the log-handling area;

(c) Fourteen straddle trucks of 6 to 12-ton capacity, 10 to 20 years old, all in fair condition; and

(d) One stacker, two loaders, four tractors, and 12 trailers of 20-ton capacity; all purchased in 1970.

11. For general cargo: the port has no quay cranes. The Port Directorate owns four forklifts which it rents to stevedoring firms. Stevedoring firms own 44 cranes of 3 to 5-tons, 41 forklifts of 2 to 10-tons, 21 tractors and 63 trailers.

E. Floating Equipment

(a) One 1,050 hp suction cutter hopper dredger built in 1963, of 500 m^3 capacity which can dispose spoil in barges, through bottom doors, or discharge through a pipeline 55 cm in diameter. Dredging output is about 280 m^3 per hour. Dredging speed is three knots and maximum speed is eight knots. Maximum draft loaded is 4.0 m and maximum dredging depth 15.0 m;

(b) One hopper barge 200 m^3 for use with the dredger;

(c) One floating dock of 1,200-ton capacity built in 1904, 62 m long and 17.5 m wide;

(d) Five tugboats of 50 to 240 hp built in 1940-1948; seven pilot launches of 50 to 240 hp built in 1949-1963; two floating cranes of 10 and 100 tons built in 1949 and 1953 and one waterbarge of 80-ton capacity built in 1953, all in fair condition.

F. Workshops

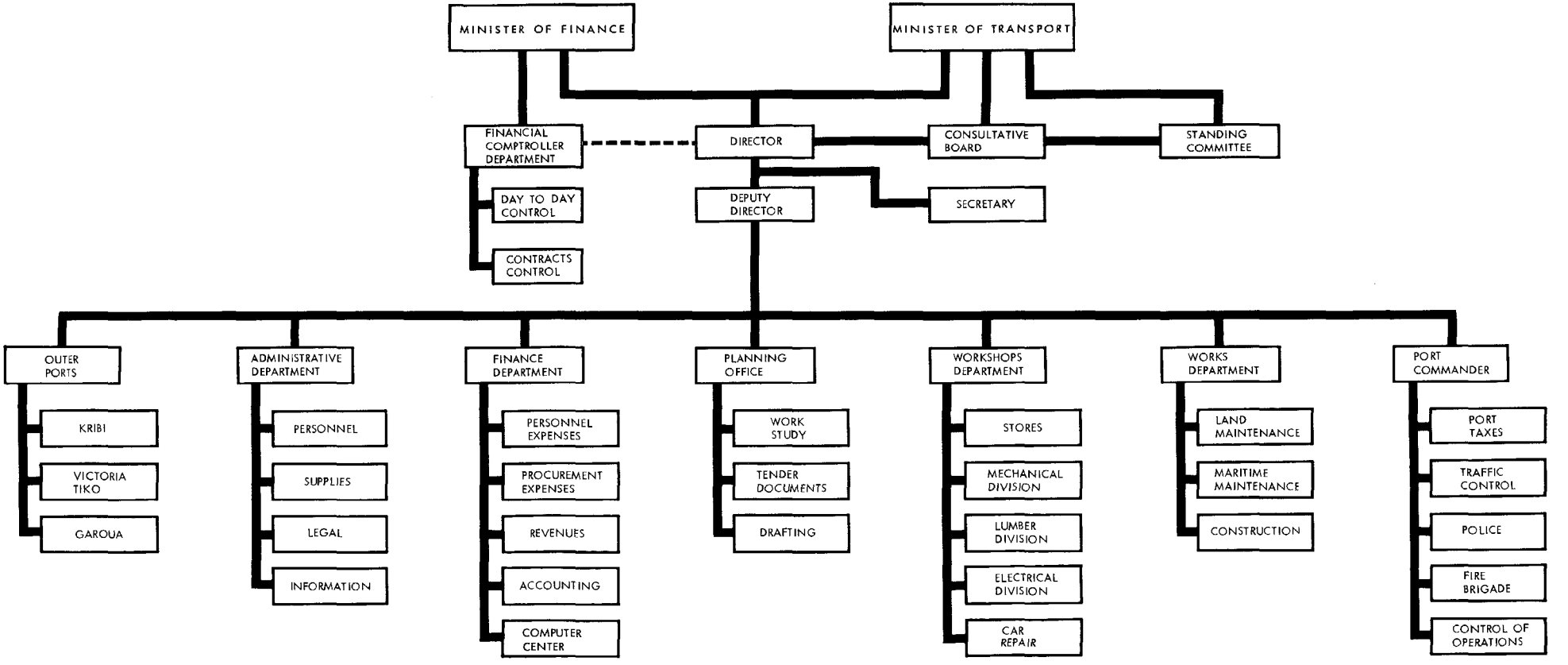
12. There are eight shops: Mechanical - 300 m^2; foundry - 150 m^2; electrical - 210 m^2; carpentry - 100 m^2; painting - 300 m^2; motor - 300 m^2; building - 500 m^2; buoys - 150 m^2. The workshops also include general stores - 150 m^2, a garage - 440 m^2 and a slipway of 100-ton capacity. Generally, all machines are kept in good condition.

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

PORTS AND WATERWAYS DIRECTORATE

ORGANIZATION CHART



November 1970

IBRD - 5041 (R)

ANNEX 4

ANNEX 5

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Draft Terms of Reference of Costing Advisor

1. The existing costing and budgetary system is designed to meet Federal Budget Annex requirements and therefore oriented to Governmental accounting methods and objectives rather than port management needs. Improvement is required in the collection and presentation of data to provide a basis for revising rates and charges and a monetary measure of operating performances. To achieve this, it has been agreed between the Bank and the Cameroon Government that a osting dvisor will be appointed for a period of about 18 months to establish a port costing and budgetary control system on commercial lines. Re-organization of the port management structure is expected to occur within the next few years; a financial analysis of port facilities and a study of operational problems is now being undertaken by OCCR/SOGREAH/DSBI. It is anticipated that an autonomous port authority will eventually be created. Meanwhile, the new system will serve port management as a supplement to existing udget nnex requirements. It should therefore be capable of correlation with general accounting records, whether the port is a Government department (as at present) or an autonomous public body (as envisaged in future). The assignment will be carried out with the full cooperation of the Cameroon Government.

Scope

2. The duties of the advisor will be to:

(a) introduce procedures for costing port services and activities to facilitate cost estimation, measurement and control;

(b) introduce procedures for budgeting revenue, recurrent and capital expenditure and cash flow;

(c) introduce a system of financial reporting to divisional head and director levels of management which highlight variances between budgeted and actual results;

(d) liaise closely with the EDP study unit responsible for planning Government computer bureau services in Douala which are expected to be made available to the port by 1972;

(e) prepare an operational manual for staff guidance concerning procedures (a) to (c) above;

(f) train staff in costing and budgetary control techniques to enable them to maintain the new procedures effectively; and

(g) help simplify the wharfage rate structure applicable to unloaded cargo.

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Outline Terms of Reference for Feasibility Study
of Timber-Handling Solutions
(Douala/Manoka Study)

1. Forecast log exports through Douala are expected to exceed one million tons in 1975. These quantities cannot be handled with present and planned facilities. The purpose of the proposed feasibility study is to analyze ways and means to increase the log-handling capacity in the greater Douala area, in particular, to compare the Douala and Manoka solutions. The solution finally recommended by the consultants will be taken into account in the long-term proposals for the development of Cameroon's deep-water port facilities.

2. The Douala solution would consist of modernizing and extending existing facilities at Douala.

3. The Manoka solution would consist of establishing a new log depot at Japoma bridge where the railway line between Douala and Yaounde crosses the Dibamba River (Map 3), organizing a system of log transport (rafts and barges) in the river between Japoma and Manoka and loading logs on ships anchored in Manoka Bay.

4. The study will include:

(a) analysis of available marine data for the Manoka region: tides, waves, wind, etc.;

(b) site measurements at Japoma, in the Dibamba River and in the Manoka Bay. These include water depth and currents;

(c) evaluation of navigation conditions between Japoma and Manoka, and loading conditions in the Manoka Bay;

(d) estimation of dredging required;

(e) technical studies for handling and transportation systems for both solutions, including handling equipment, barges, tugs, etc.;

(f) updating log export forecasts;

(g) estimates of capital and recurrent costs for both solutions; and

(h) evaluation and comparison of the two solutions; final recommendations.

5. The Port Directorate will be responsible for part 4 (b) above and consultants will be retained for the rest of the study.

December 3, 1970

ANNEX 7

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Estimated Schedule of Disbursements
(Excluding Log-Handling Equipment)

US$ 000

Quarter Ending	Disbursements	Undisbursed Credit
March 31, 1971	-	1,500
June 30, 1971	260	1,240
September 30, 1971	400	840
December 31, 1971	240	600
March 31, 1972	200	400
June 30, 1972	150	250
September 30, 1972	150	100
December 31, 1972	100	-
	1,500	

Basis:

1. Signing of credit assumed December 1970.

2. Construction expected to start in the middle of 1971 and to be completed by the end of 1972.

3. No retroactive financing will occur.

4. Letters of guarantee will be used in lieu of retention money.

December 3, 1970

ANNEX 8

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Bases and Assumptions Used in Financial Projections

1. That an IDA Credit of US$1.5 million equivalent will be made to the Government, effective March 31, 1971 and that the port renewal fund will be debited with such debt service charges as would apply to loan of the same amount at an interest rate of 7½% per annum for a period of 20 years, including 2 years grace.

2. That the principal amount outstanding of Government (FIDES) debt for Douala port was CFAF 944 million as at July 1, 1965, and that the average rate of interest thereon is 4% per annum.

3. That the Government will continue to reimburse the Douala port for Wouri Bridge maintenance costs and that the bridge will not be included in the assets of the port.

4. That there are no port liabilities other than those included in the pro-forma balance sheets given in Table 7 and that sundry debtors as at June 30, 1969 amounted to not more than CFAF 87 million.

5. Financial forecasts of earnings are based on the Port Directorate's current rates and charges and it is assumed that during fiscal 1970 and 1975 any rate adjustments consequent upon a review and relation to costs will not reduce the overall level of the rate structure.

6. The fixed assets inventory in Table 7 was prepared by association staff. Apart from land, the original cost price was ascertainable for the most expensive assets and, as they are acquired during the past seven years, this was used as a basis of valuation. Land is valued at half what it would be were it based upon recent prices prevailing for small, well-located commercial plots in Douala City. The value of other assets of unknown cost is an estimate of likely market value if sold. Asset life estimates take account of the type of structure and climatic and working conditions based upon Bank staff experience in West Africa and is the basis for depreciation on the straight line method. No account is taken of likely current replacement costs. Cumulative depreciation relates to actual life expired in most cases, or estimated where actual acquisition dates are unknown.

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Port of Douala's Principal Rates and Charges as of September 30, 1969

A. Charges Against Shipowners or Ships' Agents

1.	Pilotage per dcm of draft (in and out)	CFAF	570
	mooring/unmooring alongside	CFAF	2,300
	Pilot's waiting time:		
	per hour (day)	CFAF	1,000
	per hour (night)	CFAF	3,000
2.	Toll Fee per net registered tonnage of ship	CFAF	6
	per freight tonnage of cargo loaded and unloaded	CFAF	20
	per passenger embarking or disembarking:		
	1st Class	CFAF	1,150
	2nd Class	CFAF	850
3.	Mooring at anchorage per net registered tons		1
	alongside wharves per 100 net registered tons		4.75

B. Charges Against Consignees

4. Inward Cargo Landing Charges (Unloading)

	CFAF per ton
Category A Wines	1,900
Category B Petroleum Products (Heavy)	800
Category C Petroleum Products (Light)	560
Category 1)	850
Category 2)	500
Category 3) Covering over 1,500 commodity items	310
Category 4)	210
Category 5)	120
Category 6)	110

5. Outward Cargo Charges (Loading)

Cocoa	700
Coffee	600
Cotton	400
Bananas	100
Cement	90
Timber	75
Minerals	50
Other Cargo	400

December 3, 1970

TABLE 1

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Estimate of Cost

Item	CFAF MILLION LOCAL	CFAF MILLION FOREIGN	CFAF MILLION TOTAL	US$ 000 LOCAL	US$ 000 FOREIGN	US$ 000 TOTAL
A. Industrial Quay						
1. Site preparation	13.7	11.3	25.0	49.1	40.7	89.8
2. Sheet piles and anchorage	34.0	156.0	190.0	122.6	561.6	684.2
3. Bollards and mooring facilities	13.0	14.0	27.0	47.0	50.5	97.5
4. Fenders	2.0	8.0	10.0	7.2	28.8	36.0
5. Reclamation (12,000 m^2)	5.0	15.0	20.0	18.0	54.0	72.0
6. Dredging (20,000 m^3)	1.7	1.2	2.9	6.1	4.4	10.5
Subtotal "A"	69.4	205.5	274.9	250.0	740.0	990.0
B. Log-Handling Facilities						
7. Paving (20,000 m^2)	41.7	12.9	54.6	150.0	46.0	196.0
8. Quay (30 m long, 2 m deep)	4.2	12.4	16.6	15.0	45.0	60.0
9. Revetment (60 m long)	3.9	1.1	5.0	14.0	4.0	18.0
10. Dredging (100,000 m^3)	8.3	5.5	13.8	30.0	20.0	50.0
11. Mooring stations (for 3 ships)	4.4	16.2	20.6	16.0	58.0	74.0
12. Shifting 20 ton overhead crane	10.5	11.7	22.2	38.0	42.0	80.0
Subtotal "B"	73.0	59.8	132.8	263.0	215.0	478.0
C. Small Suction Cutter Dredger	7.0	55.6	62.6	25.0	200.0	225.0
D. Douala/Manoka Feasibility Study						
13. Port Directorate assignment	8.3	1.7	10.0	30.0	6.0	36.0
14. Consultant assignment	1.7	8.3	10.0	6.0	30.0	36.0
Subtotal "D"	10.0	10.0	20.0	36.0	36.0	72.0
E. Consultant Services						
15. Construction supervision of industrial quay and tender documents for dredger	2.4	12.8	15.2	8.4	45.6	54.0
16. Costing Advisor (18 months)	2.6	10.6	13.2	9.6	38.4	48.0
Subtotal "E"	5.0	23.4	28.4	18.0	84.0	102.0
F. Contingencies: 10% for quantities and 10% for prices of items A and B; and 20% for prices on item C	30.0	62.7	92.7	108.0	225.0	333.0
Total "A" to "F"	194.4	417.0	611.4	700.0	1,500.0	2,200.0
G. Log-Handling Equipment to be financed by the new log-handling company	-	166.6	166.6	-	600.0	600.0
Grand Total Project Cost	194.4	583.6	778.0	700.0	2,100.0	2,800.0

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Douala Port - Selected Indicators[1/]

	Unit	1965	1966	1967	1968	1969
Number of ships	No	1,001	1,049	1,315	1,500	1,769
Total Traffic	1,000 tons	1,174	1,173	1,385	1,536	1,652
Tonnage handled per ship	tons	1,172	1,118	1,053	1,024	934
Tonnage handled per m of quay per year [2/ 3/]	tons	555	555	660	710	760
Average tonnage handled per ship-day	tons	595	530	464	438	n.a.
Berth occupancy	%	65	60	74	85	n.a.

1/ All figures refer to ocean going traffic only.

2/ Excluding petroleum products.

3/ Figures for other ports on the West African coast are Lagos-Apapa (1968) 972 tons, Abidjan (1969) 927 tons, Pointe-Noire (1967) 753 tons, Port Harcourt (1967) 656 tons.

Sources: Port de Douala, Rapports annuels de la Statistique - 30th annual report, Nigerian Port Authority, 1968 - Regional Transport Survey, Cameroon and Central African Republic, 1968 - Port of Abidjan, 1970.

December 3, 1970

TABLE 2

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Douala Import and Export Traffic
(1,000 tons)

	Actual				Forecasts						
	1957-59	1967	1968	1969	1970	1971	1972	1973	1974	1975	1980
IMPORTS											
Imports for private consumption	-	263	259	230	260	290	330	370	410	455	680
Building materials	-	190	201	195	220	220	240	260	285	320	430
Fertilizer, insecticides	-	22	41	60	63	66	69	72	76	80	125
Imports for industry & public works	-	19	26	30	33	36	39	42	45	48	68
Petroleum products	-	176	231	256	260	280	303	328	355	385	560
Imports for the aluminum industry	-	126	115	114	150	150	150	150	150	150	150
Transport equipment	-	18	16	17	20	21	22	23	24	25	32
Other Imports	-	18	20	23	26	30	33	35	37	39	55
TOTAL	447	832	909	925	1,032	1,093	1,186	1,280	1,382	1,502	2,100
EXPORTS											
Timber (logs)	-	226	251	298	360	480	630	720	790	900	1,100
Sawn timber	-	29	40	53	50	50	55	70	120	140	160
Coffee	-	57	67	68	70	72	74	77	80	83	100
Cocoa	-	46	49	57	59	61	63	68	72	75	95
Cocoa products	-	n.a.	19	21	22	24	26	28	30	31	31
Bananas	-	36	32	35	35	36	37	38	39	40	50
Cotton (lint)	-	30	31	31	34	37	41	45	49	54	70
Cotton seed	-	n.a.	12	7	10	12	14	17	20	23	31
Aluminum	-	47	33	52	50	50	50	50	50	50	50
Other Exports	-	82	93	106	118	130	142	154	170	184	253
TOTAL	383	553	627	728	808	952	1,132	1,267	1,420	1,580	1,940
GRAND TOTAL	830	1,385	1,536	1,653	1,840	2,045	2,318	2,547	2,802	3,082	4,040

SOURCE: Port de Douala, Rapports Annuels de la Statistique and Consultants' forecasts.

December 3, 1970

TABLE 3

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Estimated Douala Port Fixed Assets

(CFAF Million)

	Wharves	Oil and Passenger Terminals	Warehouses	Port Admin. Buildings and Housing	Roads, Open Storage Areas and Pipelines	Timber Depots: Fixed Facilities	Timber Depots: Mobile Equipment	Workshop Buildings	Workshop Equipment and for hire	Floating Craft and Mooring Facilities	Vehicles	Land (See footnote)	Total
Annual Depreciation rate (fixed instalment)	Avge 3.5%	Avge 3.5%	3.33%	3.33%	6.67%	5%	10%	3.33%	6.67%	5%	12½%	Nil	
Cost (or estimated cost*) prior to July 1, 1965	2,743.00		940.00	78.00	737.00	248.00	100.00*	426.00*	330.00*	300.00*	20.00*	1,637.50	7,559.50
Cumulative depreciation to July 1, 1965	691.04		179.00	23.40	245.67	124.00	50.00	242.00	120.00	150.00	5.00		1,830.11
Balance June 30, 1965	2,051.96		761.00	54.60	491.33	124.00	50.00	184.00	210.00	150.00	15.00	1,637.50	5,729.39
1965/66 Additions					7.96				38.09			12.50	58.55
Depreciation	96.37		31.34	2.60	49.13	12.40	10.00	14.20	22.00	15.00	2.50		255.54
Balance June 30, 1966	1,955.59		729.66	52.00	450.16	111.60	40.00	169.80	226.09	135.00	12.50	1,650.00(1)	5,532.40
1966/67 Additions		245.00			24.29				8.84		1.95		280.08
Depreciation	96.37		31.33	2.60	49.66	12.40	10.00	14.20	24.54	15.00	2.50		258.60
Balance June 30, 1967	1,859.22	245.00	698.33	49.40	424.79	99.20	30.00	155.60	210.39	120.00	11.95	1,650.00	5,553.88
1967/68 Additions									0.60				0.60
Depreciation	96.37	8.16	31.33	2.60	51.28	12.40	10.00	14.20	25.13	15.00	2.74		269.21
Balance June 30, 1968	1,762.85	236.84	667.00	46.80	373.51	86.80	20.00	141.40	185.86	105.00	9.21	1,650.00	5,285.27
1968/69 Additions		50.46		26.77			3.14		5.73		5.42		91.52
Depreciation	96.37	8.17	31.33	2.60	51.28	12.40	10.00	14.20	25.17	15.00	2.74		269.26
Balance June 30, 1969	1,666.48	279.13	635.67	70.97	322.23	74.40	13.14	127.20	166.42	90.00	11.89	1,650.00	5,107.53
1969/70 Additions			70.00	33.00		89.00	112.00	35.00	7.50				346.50
Depreciation	96.37	9.85	31.34	3.50	51.28	12.40	10.31	14.20	25.56	15.00	3.42		273.23
Balance June 30, 1970	1,570.11	269.28	674.33	100.47	270.95	151.00	114.83	148.00	148.36	75.00	8.47	1,650.00	5,180.80
1970/71 Additions			230.00							60.00			290.00
Depreciation	96.37	9.85	33.67	4.60	51.28	16.80	11.51	15.36	26.06	15.00	3.42		283.92
Balance June 30, 1971	1,473.74	259.43	870.66	95.87	219.67	134.20	103.32	132.64	122.30	120.00	5.05	1,650.00	5,186.88
1971/72 Additions	342.00	145.00								107.40	20.00		614.40
Depreciation	96.37	9.85	41.33	4.60	51.28	16.80	11.51	15.37	26.06	18.00	0.92		292.09
Balance June 30, 1972	1,719.37	394.58	829.33	91.27	168.39	117.40	91.81	117.27	96.24	209.40	24.13	1,650.00	5,509.19
1972/73 Additions					100.00	158.80			30.00	50.00			338.80
Depreciation	110.00	15.65	41.33	4.60	51.28	21.20	11.51	15.37	26.06	22.40	3.38		322.78
Balance June 30, 1973	1,609.37	378.93	788.00	86.67	217.11	255.00	80.30	101.90	100.18	237.00	20.75	1,650.00	5,525.21
1973/74 Additions			80.00	70.00	50.00				40.00	50.00	10.00		300.00
Depreciation	110.00	15.65	41.33	4.60	57.25	23.50	11.51	15.37	28.06	26.00	3.48		337.45
Balance June 30, 1974	1,499.37	363.28	826.67	152.07	209.16	231.50	68.79	86.53	112.12	261.00	27.27	1,650.00	5,487.76
1974/75 Additions			80.00		100.00			80.00	40.00	50.00			350.00
Depreciation	110.00	15.65	44.00	6.93	61.28	23.50	11.51	15.37	30.73	28.50	3.73		351.20
Balance June 30, 1975	1,389.37	347.63	862.67	145.14	247.88	208.00	57.28	151.16	121.39	282.50	23.54	1,650.00	5,486.56

Note (1) Estimated land value based upon (a) Douala land - 620,000 sq. meters @ 2,500 CFAF each and
(b) Bonaberi land 100,000 sq. meters @ 1,000 CFAF each.

Source: Bank Staff

December 3, 1970

ANNEX 4

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Actual and Forecast Operating Income and Expense Account -
(Years Ending June 30)

(CFAF Millions)

	ACTUAL						FORECAST									
	1965/66		1966/67		1967/68		1968/69		1969/70		1970/71		1971/72		1972/73		1973/74		1974/75	
OPERATING INCOME																				
Charges against ships:																				
Pilotage	32.50		38.58		43.75		43.52		45.43		48.30		49.80		52.00		57.42		62.58	
Toll Fees	42.80		47.70		49.47		49.59		54.64		59.50		65.94		71.90		79.90		87.66	
Mooring & Wharfage	32.82		40.14		44.88		44.42		45.00		47.25		50.10		53.60		57.70		63.00	
Miscellaneous	1.40		1.34		4.54		3.20		3.00		3.00		3.00		3.00		3.00		3.00	
Maritime Services	1.17	110.69	1.26	129.02	3.05	145.69	8.32	149.05	7.58	155.65	8.00	166.05	8.10	176.94	8.20	188.70	8.30	206.32	8.40	224.
Charges Against Merchandise:																				
Exports	117.39		119.04		125.66		203.03		217.70		237.60		260.60		283.20		307.10		330.40	
Imports	275.06	392.45	308.74	427.78	273.22	398.88	405.07	608.10	401.25	618.95	428.58	666.18	465.17	725.77	504.12	787.32	545.67	852.77	592.76	923.
Port Estate Revenue:																				
Warehouses & Open Storage	102.98		106.99		118.57		120.99		124.28		128.00		132.00		134.00		136.00		138.00	
Timber Depot	19.82	122.80	19.35	126.34	25.00	143.57	28.31	149.30	30.00	154.28	35.00	163.00	40.00	172.00	40.00	174.00	40.00	176.00	40.00	178.
Port Services & Supplies:																				
Equipment & Craft Hire	16.37		18.24		21.49		38.21		36.35		43.35		43.00		43.00		43.00		43.00	
Workshop Services	4.29		7.14		7.84		10.40		12.00		12.50		13.00		13.50		14.00		14.50	
Water & Electricity	18.44		22.86		30.31		33.20		34.00		35.70		37.40		39.30		41.30		43.40	
De-insectization Services	15.17		17.68		11.20		18.23		15.00		16.00		16.00		16.50		16.50		17.00	
Dredging & Buoying	31.55		26.49		16.06		34.45		41.50		16.00		16.00		16.00		16.00		16.00	
Miscellaneous Charges	2.16	87.98	3.25	95.66	7.26	94.16	14.46	138.95	1.85	140.70	1.50	125.05	1.50	126.90	1.50	129.80	1.50	132.30	1.50	135.
Wouri Bridge-Recovery of Maintenance Costs		16.00		16.00		16.00		16.00		10.00		10.00		10.00		10.00		10.00		10.
Total Operating Income		729.92		794.80		798.30		1,061.40		1,079.58		1,130.28		1,211.61		1,289.82		1,377.39		1,471.
OPERATING EXPENSES																				
Exploitation Division :																				
Personnel	25.48		28.97		29.80		28.46		35.29											
Supplies	15.89	41.37	18.19	47.16	26.01	55.81	32.16	60.62	32.55	67.84	73.00		78.00		85.00		92.00		100.	
Maritime Service Division:																				
Personnel	9.48		10.37		12.51		14.05		22.41											
Supplies	2.29	11.77	2.75	13.12	5.42	17.93	7.29	21.34	12.04	34.45	38.00		41.00		44.00		47.50		51.	
Administration & Finance Division:																				
Personnel	27.15		30.38		26.53		29.84		37.95											
Supplies	9.26	36.41	10.85	41.23	10.51	37.04	11.54	41.38	13.18	51.13	65.00		69.00		73.00		77.00		80.	
Works & Maintenance Division:																				
Personnel	44.59		47.47		48.71		49.60		51.00											
Supplies	20.60	65.19	22.30	69.77	19.50	68.21	27.79	77.39	31.54	82.54	86.00		90.00		94.00		98.50		103.	
Equipment & Workshops Division:																				
Personnel	86.51		90.89		93.39		96.75		108.00											
Division	44.18	130.69	43.85	134.74	41.45	134.84	42.76	139.51	49.77	157.77	164.00		170.00		176.00		182.50		189	
Waterways Conservation Division:																				
Personnel	34.38		42.93		45.26		44.74		54.94											
Supplies	66.45	100.83	77.70	120.63	82.58	127.84	73.14	117.88	74.60	129.54	140.00		145.00		150.00		155.00		160	
		386.26		426.65		441.67		458.12		523.27	566.00		593.00		627.00		652.50		683	
Unclassified:																				
Personnel	13.83		12.52		20.74		20.00		18.00											
Supplies	23.97	37.80	13.68	26.20	24.93	45.67	25.00	45.00	27.00	45.00	50.00		52.00		54.00		56.00		57	
Costing Adviser											6.00		7.20							
Major Repairs:																				
Port Property	14.35		29.45		1.52		11.41		2.15											
Port Equipment							4.67		10.00											
Timber Yard Equipment	6.52				8.51		12.21		28.00											
Wouri Bridge		20.87		29.45	0.64	10.67	1.50	29.79	5.00	45.15	30.00		31.00		32.00		33.00		34.	
Estimated Depreciation		255.54		258.60		269.21		269.26		273.23	283.92		292.09		322.78		337.45		351.	
Total Operating Expenses		700.47		740.90		767.22		802.17		886.65	935.92		975.29		1,030.78		1,078.95		1,127.	
Net Operating Income		29.45		53.90		31.08		259.23		192.93	194.36		236.32		259.04		298.44		344.	
Interest on Long Term Debts		33.00		33.00		34.00		33.00		33.00	36.00		52.00		63.20		61.70		60.	
Net Income (Loss)		(3.55)		20.90		(2.92)		226.23		159.93	158.36		184.32		195.84		236.74		283.	
Times Interest Covered		0.9x		1.6x		0.9x		7.8x		5.8x	5.4x		4.4x		4.0x		4.6x		5.	
Total Debt Service		24.00		24.00		38.00		38.00		38.00	41.00		57.00		87.00		93.00		93.	
Times Debt Service Covered		11.8x		13.0x		8.0x		13.1x		12.2x	11.6x		9.3x		6.7x		6.9x		7.	
Operating Ratio		96%		93%		96%		76%		82%	83%		81%		80%		78%		77	
Return of Net Operating Income to Net Fixed Assets in Use		0.5%		0.9%		0.5%		5.0%		3.7%	3.7%		4.6%		4.7%		5.4%		6.	

Source: Bank Staff

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

(CFAF Million)

Pro-Forma Balance Sheets
(As at 30 June)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
ASSETS										
Current Assets										
Cash with State Bank (Port Renewal Fund)	234.30	244.78	516.12	713.90	346.50	343.02	635.93	963.44	1,147.58	1,399.32
Accounts Receivable	70.00	70.00	70.00	87.00	87.00	89.00	94.00	100.00	107.00	114.00
Stores	27.00	27.00	23.00	23.00	22.00	22.00	22.00	23.00	23.00	24.00
Loans to Staff	-	1.50	3.00	3.00	4.50	6.00	6.00	6.00	6.00	6.00
Total Current Assets	331.30	343.28	612.12	826.90	460.00	460.02	757.93	1,092.44	1,283.58	1,543.32
Fixed Assets										
Total Fixed Assets	7,618.05	7,898.13	7,898.73	7,990.25	8,336.75	8,626.75	9,241.15	9,579.95	9,879.95	10,229.95
Less Accumulated Depreciation	2,085.65	2,344.25	2,613.46	2,882.72	3,155.95	3,439.87	3,731.96	4,054.74	4,392.19	4,743.39
Net Fixed Assets in Use	5,532.40	5,553.88	5,285.27	5,107.53	5,180.80	5,186.88	5,509.19	5,525.21	5,482.76	5,486.56
Works and Equipment in Progress	130.78	-	6.77	49.58	105.84	271.00	100.00	-	-	-
Total Net Fixed Assets	5,663.18	5,553.88	5,292.04	5,157.11	5,286.64	5,457.88	5,609.19	5,525.21	5,487.75	5,486.56
Cost of Major Port Development Studies				45.69	108.69	168.69	178.69	178.69	178.69	178.69
Total Assets	5,994.48	5,897.16	5,904.16	6,029.70	5,855.33	6,086.59	6,545.81	6,796.34	6,950.03	7,208.57
LIABILITIES										
Current Liabilities										
Accounts Payable	40.00	40.00	40.00	45.00	45.00	50.00	50.00	54.00	58.00	60.00
Long Term Debts										
Government (FIDES)	953.00	962.00	958.00	953.00	948.00	943.00	938.00	920.00	901.00	882.00
IBRD	-	-	-	-	-	72.00	347.00	411.19	398.94	385.78
Total Long Term Debts	953.00	962.00	958.00	953.00	948.00	1,015.00	1,285.00	1,331.19	1,299.94	1,267.78
Equity										
Balance at July 1, 1965	5,008.81	5,008.81	5,008.81	5,008.81	5,008.81	5,008.81	5,008.81	5,008.81	5,008.81	5,008.81
Less Accumulated Subsidization of Minor Ports since July 1, 1965	3.78	131.00	117.08	217.77	202.07	201.17	196.27	191.77	247.57	241.97
	5,005.03	4,877.81	4,891.73	4,791.04	4,806.74	4,807.64	4,812.54	4,817.04	4,761.24	4,766.84
Add Accumulated Net Income since July 1, 1965	(3.55)	17.35	14.43	240.66	*55.59	213.95	398.27	594.11	830.85	1,113.95
Total Equity	5,001.48	4,895.16	4,906.16	5,031.70	4,862.33	5,021.59	5,210.81	5,411.15	5,592.09	5,880.79
Total Liabilities	5,994.48	5,897.16	5,904.16	6,029.70	5,855.33	6,086.59	6,545.81	6,796.34	6,950.03	7,208.57
Debt/Equity Ratio	16/84	16/84	16/84	16/84	19/81	20/80	25/75	25/75	23/77	22/78

*Accumulated Net Income since July 1, 1965 CFAF 400.59 million less CFAF 345 million withdrawn by Government from Port Renewal Fund.

Source: Bank Staff

December 3, 1970

TABLE 9

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Cash Flow
(Years Ending June 30)

(CFAF Million)

	ACTUAL				FORECAST						Total Forecast 1969/70 to 1974/75	Percentage
	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75		
A. CASH REQUIRED												
Capital Investments												
IBRD Project						126.0	393.4	58.8			578.2	25
Other	189.3	149.3	7.4	180.0	465.8	369.1	60.0	180.0	300.0	350.0	1,724.9	74
	189.3	149.3	7.4	180.0	465.8	495.1	453.4	238.8	300.0	350.0	2,303.1	99
Technical Assistance under IBRD Loan												
Douala/Manoka Study						20.0					20.0	1
Total Cash Required	189.3	149.3	7.4	180.0	465.8	515.1	453.4	238.8	300.0	350.0	2,323.1	100
B. CASH AVAILABLE												
Net Operating Income	29.5	53.9	31.1	259.2	193.0	194.4	236.3	259.0	298.4	344.0	1,525.1	
Depreciation	255.5	258.6	269.2	269.3	273.2	283.9	292.1	322.8	337.5	351.2	1,860.7	
	285.0	312.5	300.3	528.5	466.2	478.3	528.4	581.8	635.9	695.2	3,385.8	
Less Debt Service	24.0	24.0	38.0	38.0	38.0	41.0	57.0	87.0	93.0	93.0	409.0	
Less Working Capital Changes	24.0	1.5 25.5	(2.5) 35.5	12.0 50.0	0.5 38.5	(1.5) 39.5	5.0 62.0	3.0 90.0	3.0 96.0	6.0 99.0	16.0 425.0	
Net Internal Generated Cash (Douala)	261.0	287.0	264.8	478.5	427.7	438.8	466.4	491.8	539.9	596.2	2,960.8	
Govt. Withdrawal from Port Renewal Fund					(345.0)						(345.0)	
Cash at beginning of year	166.4	234.3	244.8	516.1	713.9	346.5	343.1	636.0	963.5	1,147.6	713.9	
Cash from (to) Minor Ports	(3.8)	(127.2)	13.9	(100.7)	15.7	0.9	4.9	4.5	(55.8)	5.6	(24.2)	
	162.6	107.1	258.7	415.4	384.6	347.4	348.0	640.5	907.7	1,153.2	3,305.5	
Less Cash at end of year	234.3 (71.7)	244.8 (137.7)	516.1 (257.4)	713.9 (298.5)	346.5 38.1	343.1 4.3	636.0 (288.0)	963.5 (323.0)	1,147.6 (239.9)	1,399.4 (246.2)	1,399.4	
Internal Generated Cash used for Capital Investment	189.3	149.3	7.4	180.0	465.8	443.1	178.4	168.8	300.0	350.0	1,906.1	82
IBRD Loan						72.0	275.0	70.0			417.0	18
Total Cash Available	189.3	149.3	7.4	180.0	465.8	515.1	453.3	238.8	300.0	350.0	2,323.1	100

TABLE 7

Source: Bank Staff

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

TABLE 8

FIRST DOUALA PORT PROJECT

MINOR PORTS OF KRIBI, VICTORIA/TIKO AND GAROUA

Actual and Forecast Operating Income and Expense Account

(Years ending June 30)

(CFAF Millions)

	ACTUAL			ESTIMATED	FORECAST					
	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75
KRIBI										
Operating Income										
Wharfage & Mooring	0.16	0.20	0.09	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Loading	17.35[1]	15.29	4.82[2]	16.43	18.60	23.20	26.00	28.90	32.00	35.00
Unloading	1.56	2.74	2.94	1.84	1.90	2.00	2.20	2.30	2.50	2.70
Storage & Equipment Hire	0.11	0.10	0.08	0.06	0.20	0.20	0.20	0.20	0.20	0.20
Maintenance Services	1.53	1.55	0.86	1.17	4.80	4.80	4.80	4.80	4.80	4.80
Wood Depot	6.07	2.92	3.33	8.65	6.00	6.00	6.00	6.00	6.00	6.00
	26.78	22.80	12.12	28.45	31.80	36.50	39.50	42.50	45.80	49.00
Operating Expenses										
Personnel	8.22	8.10	8.96	9.82	10.98	15.10	16.30	17.50	18.80	20.20
Supplies	3.76	3.89	3.90	5.91	8.01	8.50	9.00	9.60	10.30	11.00
Major Repairs	1.31	0.47	0.78	1.49	2.00	2.00	2.00	2.00	2.00	2.00
Miscellaneous	0.29	0.19	0.14	0.18	0.18	0.20	0.20	0.20	0.20	0.20
	13.58	12.65	13.78	17.40	21.17	25.80	27.50	29.30	31.30	33.40
Net Operating Income (Loss)	13.20	10.15	(1.66)	11.05	10.63	10.70	12.00	13.20	14.50	15.60
Debt Service	3.25	3.25	3.00	3.60	3.60	3.60	3.60	4.50	4.50	4.50
Net Income (Loss)	9.95	6.90	(4.66)	7.45	7.03	7.10	8.40	8.70	10.00	11.10
VICTORIA/TIKO										
Operating Income										
Pilotage	5.42	4.39	4.55	3.80	3.50	3.10	2.70	2.40	2.10	1.90
Light & Mooring Fees	33.72	28.63	27.00	23.82	17.50	15.30	13.30	11.70	10.20	9.20
Miscellaneous	0.84	0.69	0.97	1.28	0.50	1.10	1.10	1.10	1.10	1.10
Loading	10.16	5.96	6.54	6.28	6.50	5.90	5.30	4.80	4.20	3.80
Unloading	9.56	5.31	6.90	5.28	4.50	3.80	3.00	2.30	1.50	0.80
Stevedoring					28.00	25.00	21.00	18.00	14.00	8.00
Storage Space Rental					2.00	7.90	6.90	6.10	5.30	4.70
	59.70	44.98	45.96	40.46	69.50	62.10	53.30	46.40	38.40	29.50
Operating Expenses										
Personnel[3]	8.56	11.27	12.62	13.20	13.90	14.60	15.40	16.20	17.00	17.80
Supplies	5.37	2.40	3.26	3.23	4.50	4.50	4.20	3.20	3.00	2.00
Buoying & Dredging	10.00	13.00	-	13.00	14.00	14.00	14.00	14.00	10.00[4]	10.00
Major Repairs	-	2.00	-	1.00	5.50	1.00	1.00	1.00	1.00	1.00
Miscellaneous	0.54	0.07	0.42	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	24.47	28.74	16.30	30.63	38.10	34.30	34.80	34.60	31.20	31.00
Net Operating Income (Loss)	35.23	16.24	29.66	9.83	31.40	27.80	18.50	11.80	7.20	(1.50)
GAROUA										
Operating Income										
Wharfage & Mooring	-	1.81	0.50	0.38	-					
Loading	7.83	7.95	0.27	-	-					
Unloading	9.04	7.83	0.22	-	-					
Warehouse Rents	2.55	-	-	1.62	1.00					
Equipment Hire	2.75	-	-	0.54	1.00					
Sanitation Services	1.58	1.56	0.20	0.59	-					
Miscellaneous	0.87	0.27	-	-	0.05					
	24.62	19.42	1.19	3.13	2.95	SEE NOTE (5) BELOW				
Operating Expenses										
Personnel	6.07	5.30	4.87	5.01	8.05					
Supplies	3.29	3.54	1.94	4.30	5.36					
Miscellaneous	0.30	0.25	-	-	0.74					
Major Repairs	1.71	1.89	-	0.47	1.70					
	11.37	10.98	6.81	9.78	15.85	SEE NOTE (5) BELOW				
Net Operating Income (Loss)	13.25	8.44	(5.62)	(6.65)	(13.80)	(12.00)	(10.00)	(7.00)	(4.00)	-
Debt Service	0.50	0.50	0.63	-	-	-	-	-	-	-
Net Income (Loss)	12.75	7.94	(6.25)	(6.65)	(13.80)	(12.00)	(10.00)	(7.00)	(4.00)	-

1/ This sum includes 4.7 million relative to previous years' bills.

2/ A shortfall of 8.1 million is reported due to the default of timber merchants. The discrepancy has not been commented upon in budget reports issued subsequently.

3/ Unless there is a likelihood of a traffic trend reversal beyond 1975 steps should be taken to lessen recurrent expenditure by staff reductions (e.g., transfers to Douala as vacancies permit).

4/ It is assumed that the extent of dredging and buoying can be reduced in 1973/74 and 1974/75 consequent upon the fall in port traffic.

5/ As no reliable detailed forecasts can be made it is assumed that the net loss will be gradually reduced to nil by 1974/75 either by profitable activity or by eliminating all port expenditure by total closure and abandonment.

Source: Bank Staff

December 3, 1970

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Cash to (from) Port Renewal Fund - Minor Ports

(CFAF Millions)

	ACTUAL				FORECAST					
Net Income (Loss):	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75
Kribi	9.95	6.90	(4.66)	7.45	7.03	7.10	8.40	8.70	10.00	11.10
Victoria/Tiko	35.23	16.24	29.66	9.83	31.40	27.80	18.50	11.80	7.20	(1.50)
Garoua	12.75	7.94	(6.25)	(6.65)	(13.80)	(12.00)	(10.00)	(7.00)	(4.00)	-
	57.93	31.08	18.75	10.63	24.63	22.90	16.90	13.50	13.20	9.60
Less Capital Expenditure:										
Kribi[1/]	1.53	55.80	0.47	22.89	4.00	14.00	7.00	4.00	64.00[3/]	4.00
Victoria/Tiko[2/]	51.34	102.50	0.50	88.43	3.00	8.00	5.00	5.00	5.00	-
Garoua	8.84	-	3.86	-	1.93	-	-	-	-	-
	61.71	158.30	4.83	111.32	8.93	22.00	12.00	9.00	69.00	4.00
Cash to (from) Port to Renewal Fund	(3.78)	(127.22)	13.92	(100.69)	15.70	0.90	4.90	4.50	(55.80)	5.60

1/ Should a substantial rise in timber exports occur in 1972/73 and subsequently (consultant's economic forecasts indicate such a possibility) capital expenditure in excess of four million per year may be necessary in 1972/73 and 1974/75.

2/ Included in 1965/66, 1966/67 and 1968/69 are payments to the Cameroon Development Corporation totalling 236.065 million for purchase of port installations.

3/ Construction of a breakwater costing about CFAF 60 million is provided as minimum capital investment required to cope with increased activity.

Source: Bank Staff

December 3, 1970

TABLE 9

FEDERAL REPUBLIC OF CAMEROON

FIRST DOUALA PORT PROJECT

Actual and Forecast Imports and Exports Via Minor Ports

000's Tons

		Actual				Forecast					
		1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75
Kribi	Imports	13	23	24	15	16	17	19	20	22	24
	Exports	46	39	53	65	74	93	104	115 2/	127 2/	140 2/
	Total	59	62	77	80	90	110	123	135	149	164
Victoria/Tiko	Imports	64	50	55	52	44	37	29	22	14	7
	Exports	70	46	50	54	50	45	41	37	32	29
	Total	134	96	105	106	94	82	70	59	46	36

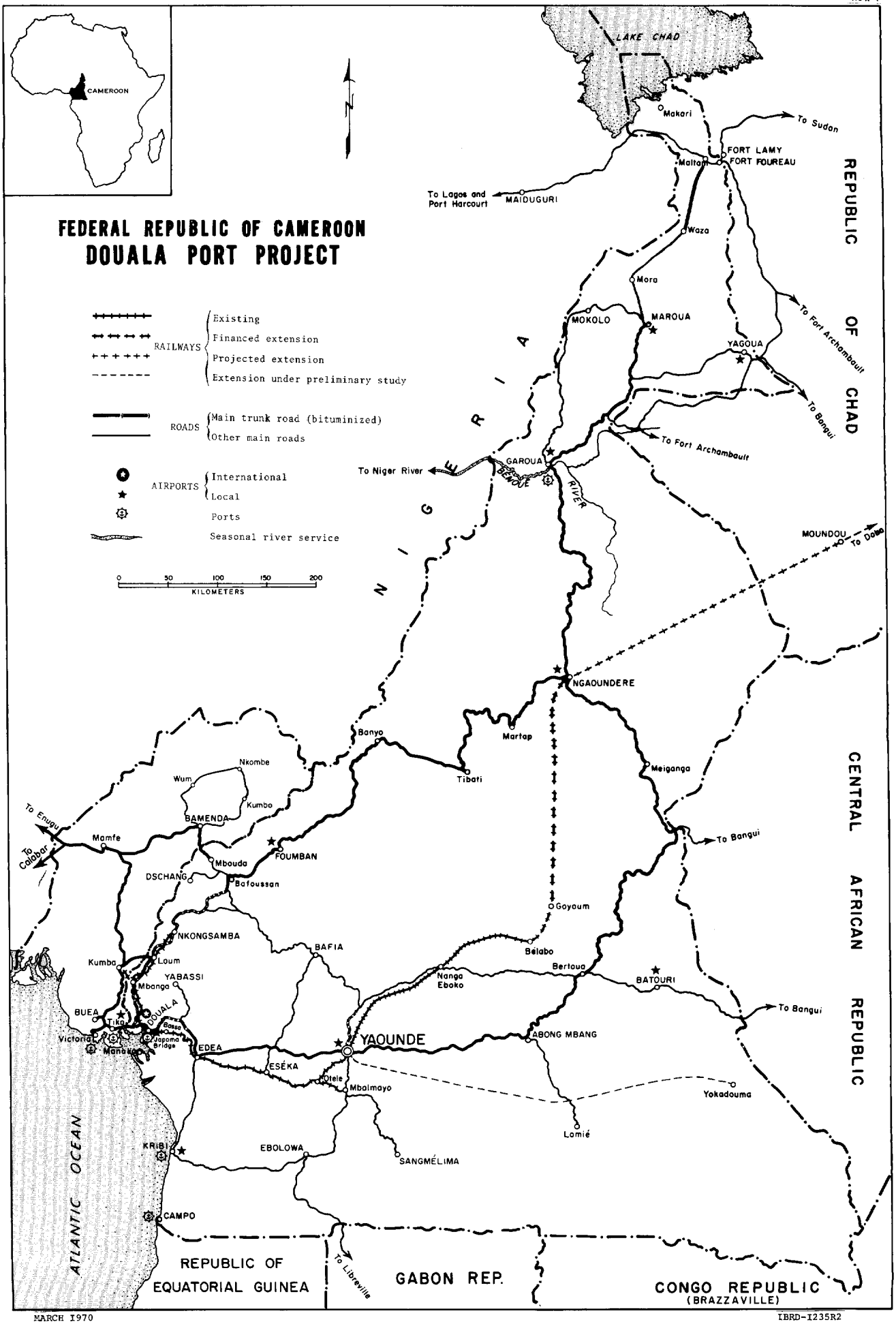
1/ The seasonal port of Garoua has been inactive since 1968 consequent upon the Nigerian Civil War. It is not possible at this juncture to forecast future traffic.

2/ There is a possibility of rapid growth in timber exports during this period which could result in total exports (all cargo) reaching 168,000 tons in 1972/73 and 217,000 tons by 1974/75. However, a modest growth has been assumed for financial forecast purposes.

Source: Consultants OCCR/SOGREAH/DSBI and Bank Staff

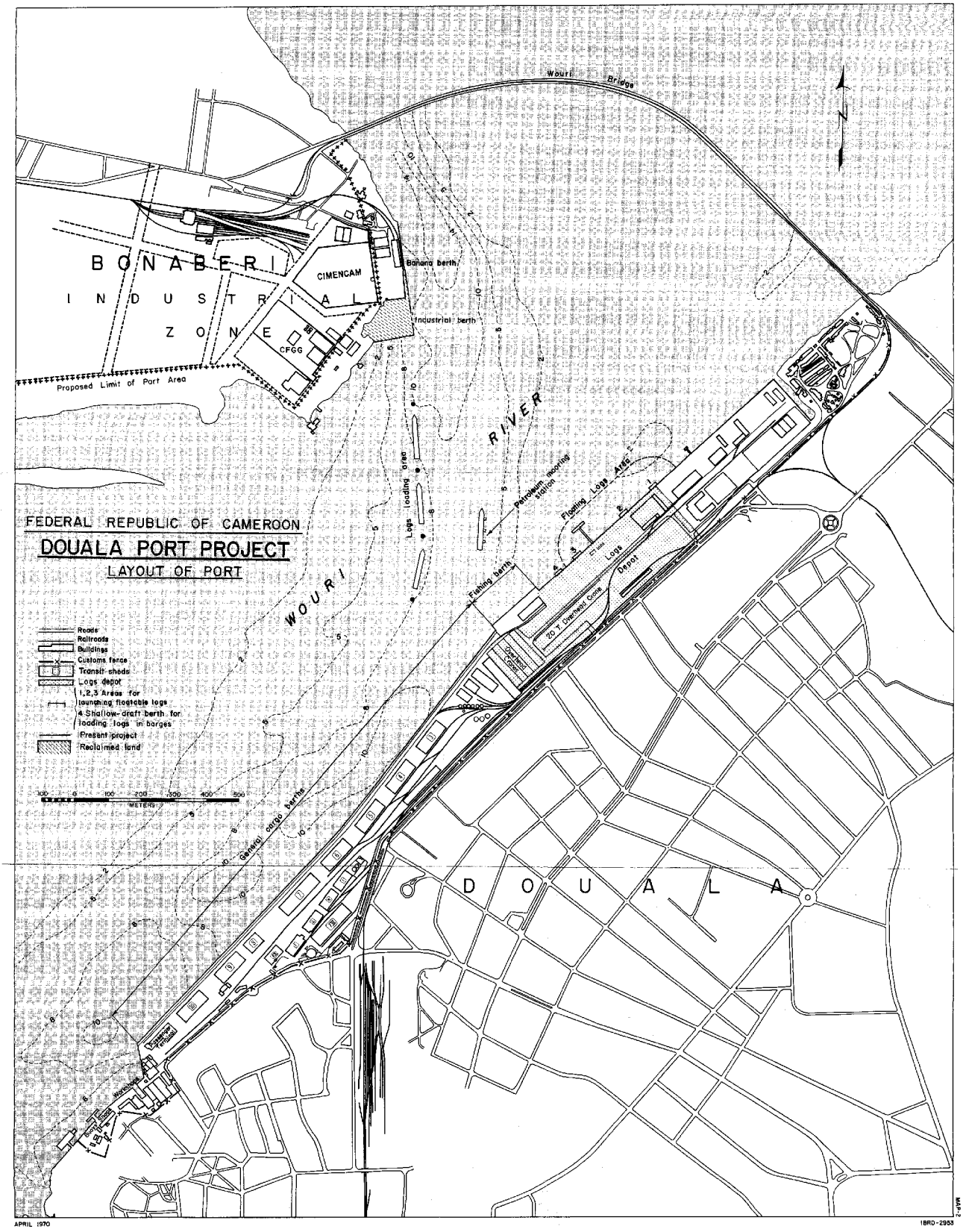
December 3, 1970

TABLE 10



MARCH 1970

IBRD-1235R2



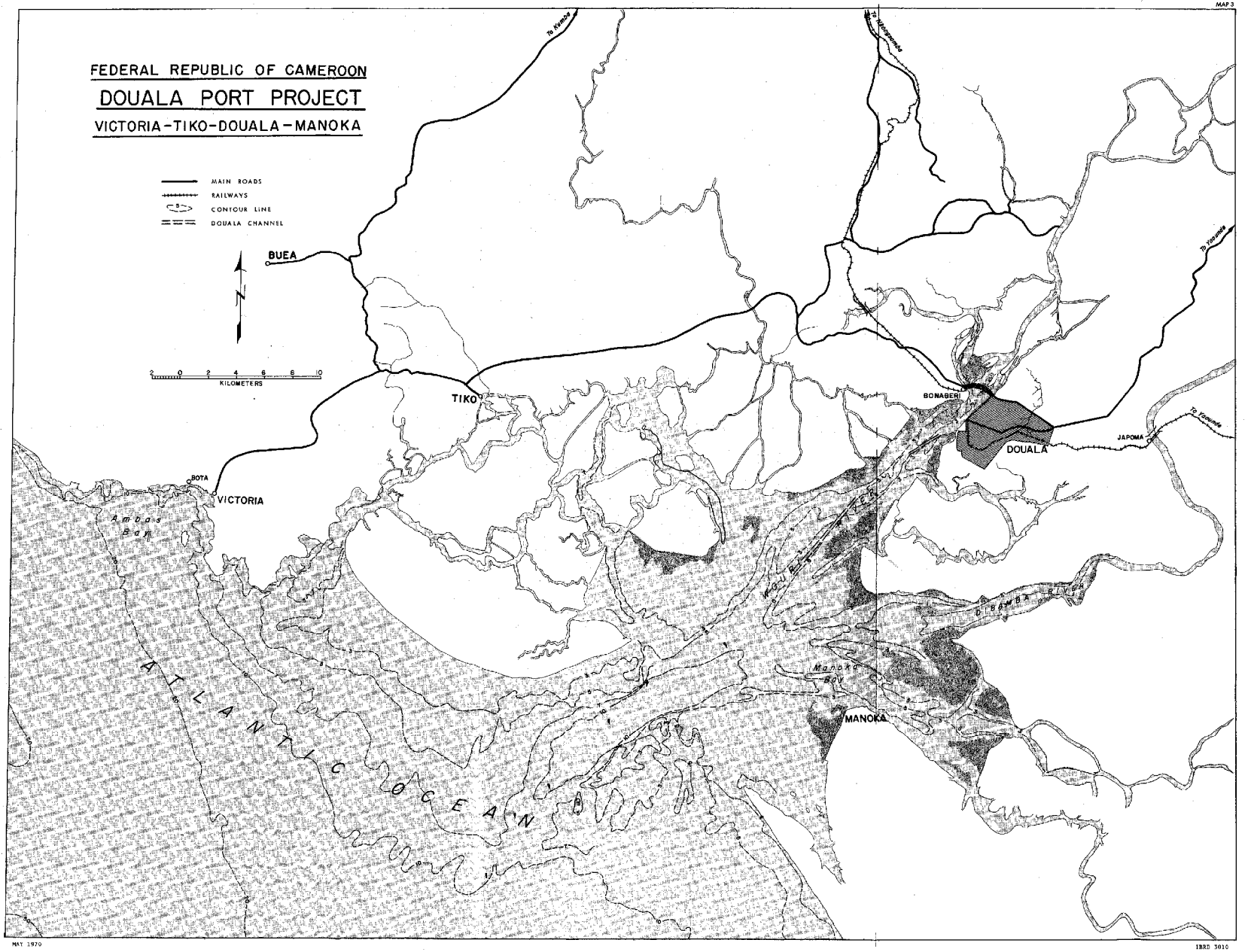
FEDERAL REPUBLIC OF CAMEROON

DOUALA PORT PROJECT

LAYOUT OF PORT

APRIL 1970

IBRD-2953



MAY 1970

IBRD 3010