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Power- Terms of Reference, Anitial Documents Comparative Review

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Power - Terms of Reference - Initial Documents - Comparative Review - 1971

DECLASSIFIED WBG Archives

ce memorand

Messrs. Israel, Marot, Faltas, Raphaeli,

Ettori and Miss Harahap

DATE:

July 14, 1971

FROM:

TO:

C. R. Willoughby (AUV

SUBJECT:

Presentation of the Operations Evaluation reports

due for completion by July 31.

Attached are the initial pages of the Evaluation Report Volume IV - THE PAZ DEL RIO STEEL MILL. These pages should be used as a format for title page, note on conversion rates and measurements, Preface, Table of Contents (including main sub-headings in each chapter, only), List of Tables, List of Charts and Maps, and List of Annex Tables in all reports. Other details regarding presentation appeared in the note of June 29. Please note that page numbers should be given for all Chapter, main subheadings, tables in the text, and charts in the text. Some are presently lacking in the attached sample only because typing of the report is not yet complete.

cc: Mr. Adler

Mr. Blaxall

Mr. Paulson

Mr. Anderson

Mr. Wallar

Miss Levy

Miss Mulin

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PRELIMINARY DRAFT 7/31/71

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

JAN 24 2023
WBG ARCHIVES

OPERATIONS EVALUATION REPORT: COLOMBIA

VOLUME IV - THE PAZ DEL RIO STEEL MILL

NOTE

Most Colombian Peso prices given in this report are in Pesos of 1968 value. The conversion rate used is then the average official rate obtaining in that year, Ps. 15.90 = U. S. \$1.00.

Ton measurements are given in metric tons.

PREFACE

Acerias Paz del Rio, S. A., a private-sector Colombian company, owns and operates the only fully integrated steel mill in Colombia. The Company, and its predecessor, have had dealings with the International Bank continually since 1950. In 1963 a loan of \$30 million (Loan 3h5-CO) was made by the Bank to the Company to cover the foreign exchange cost of the Company's expansion program. This report reviews experience 1950-70 and attempts to draw conclusions as regards the future operations of the Bank.

The report has been prepared by Bernard H. Decaux, industrial economist and consultant to the Bank, and Christopher R. Willoughby of the Bank staff. The main field work was done in late December 1970 and January 1971. Principal contacts were with the Company, the Departamento Nacional de Planeacion of the Government of Colombia, representatives of other major steel producers and steel consumers, and with others who had been involved in the development of the Company.

The Acerias gave to the study the utmost cooperation, and its assistance is deeply appreciated. Useful help in early analyses was kindly provided by staff of the Departamento Nacional de Planeacion. The authors are also very grateful for the stimulating advice and suggestions provided by staff-members of the Bank at various times.

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OFFICE MEMORANDUM

Messrs. Israel, Marot, Falkas, TO: Raphaeli & Ettori

DATE: June 29, 1971

FROM:

C. R. Willoughby (KIV)

SUBJECT:

Presentation of the Operations Evaluation reports due for completion by July 31.

Further to my note of June 21 on the chapters and volumes of the reports now under preparation. I want to give you a few rules of presentation for the final versions due for completion by July 31.

Papers should be double spaced, since they will remain drafts for delivery to Mr. McNamara. They should be run off in 15 copies only, preferably with printing on both sides of the page, and stapled between white card covers. These covers should be marked in the top right hand corner 'STRICTLY CONFIDENTIAL,' and the reports should be numbered from 1 through 15. You should deliver to me 14 of the 15 copies of the sector volume for which you are responsible. No copies should at this stage be passed to anyone without specific reference to me. I hope that this restriction will not be necessary for long, although the documents will necessarily remain for the next months highly confidential.

I think it is generally preferable not to number the paragraphs. Footnotes should of course be done in the normal Bank style, i.e., at the bottom of the page or table, with textual footnotes indicated by numbers and fcotnotes for tables indicated by lower case letters. The numbers or letters used should be consecutive not for the whole chapter or whole report but only for the page on which they occur.

Tables themselves should be numbered by chapter, eg., Table 3.8 meaning the eighth table in the third chapter. Tables should also be presented the same way up as the text so that they can be read without rotating the documents; this may mean using fold-out tables.

It is very important that past or present Bank staff members not be mentioned by name, but if necessary at all by their general rank, eg. 'an IBRD Vice President, ' or 'the Bank staff responsible, etc. It would also be generally best to avoid using the names of Colombian officials, though this may obviously be necessary for clarity occasionally. Consultant firms, on the other hand, should normally be referred to by name -- and in some cases contractors too.

As mentioned in a previous memo the so called Currie report of 1950 should not be so referred to but rather 'the Report of the 1949 General Survey Mission.' Survey Mission. 1

Documents produced by other than Bank staff members should of course be referred to, usually in footnotes, in the normal way -- giving the author, the title of the document and the city and date of publication. Albert Berry's report on the development of Colombia since World War II may be referred to in this manner.

A very important point is to use the dollar sign only for U. S. dollars and either the full word 'pesos' or 'Ps.' to indicate Colombian pesos. At all events I want to avoid the use of 'Col. \$' sometimes encountered to indicate pesos.

I do not favor colored charts and maps. The main disadvantages are that they are not reproducible on Xerox and that they are expensive; in addition I often cannot tell the difference between colors, particularly black and some shades of red. I think it is much preferable to use all sorts of different combinations of dots and dashes and thicknesses of lines, etc. At the same time I recognize that it may sometimes be necessary to use colors particularly in connection with maps and this is of course O. K. provided that it is kept to a minimum.

cc: Mr. Adler

Mr. Blaxall

Mr. Hexner

Mr. Roumani

Mr. Paulson

Mr. Anderson

Mr. Wallar

Miss Levy

Miss Mulin

Miss Harahap

ce memorand

Messrs. Israel, Marot, Faltas, Hexner,

Raphaeli & Roumani TO:

June 21, 1971 DATE:

FROM:

C. R. Willoughby Chl

Make-up of Draft Operations Evaluation Report on Colombia SUBJECT:

> I give below, subject to your comments and to any other changes, my current thinking about the volume numbering for the draft of the Operations Evaluation Report on Colombia that we are targetting for completion on July 31. I also give greater details than previously about the chapters of the General Report (Volume I), some of which will be based directly upon your own reports; the chapter layout is still fairly tentative.

Volume I - General Report

Approximate No. of pages

3 5 15		Preface Introduction		
15		Chapter I	-	The Setting (CRW)
20		Chapter II	-	The Development Accomplished (CRW
		(i)		& Jim Wallar)
20		Chapter III	•	The Development Issues (CRW & Jim Wallar)
5		Chapter IV	-	The Role of Foreign Assistance
		*		(Luis Landau & CRW)
20		Chapter V	-	The Role of the IBRD (Tomas Hexner & CRW)
15		Chapter VI	-	The Transport Sector (Arturo Israel)
10 5 6		Chapter VII	-	The Power Sector (Antoine Marot)
5	-	Chapter VIII	-	The Paz del Rio Steel Mill (CRW)
6		Chapter IX	-	The Corporaciones Financieras (Ediana Harahap & CRW)
10		Chapter X		The Agricultural Sector (Nabil Faltas)
10		Chapter XI	-	Institutional Development and the IBRD (Nimrod Raphaeli)
10		Chapter XII	-	Urban Growth and the IBRD - main
				reference to water supply and
				to Bogota (Jacques Roumani & CRW)
. 5		Chapter XIII	653	The Consultative Group (CRW)
20		Chapter XIV	-	Conclusions (Tomas Hexner & CRW)
10		Chapter XV	-	Summary Recommendations (Tomas Hexner & CRW)

The Transport Sector (Arturo Israel, with Tomas Hexner, Leon Volume II -Miller, Morris Miller, Marie-Noelle Mulin, Eleanor Levy)

Volume II Annex I	- Technical Annexes, to be bound in a separate volume.
Volume III	- The Power Sector (Antoine Marot, with Arne Paulson)
Volume IV	- The Paz del Rio Steel Mill (Bernard Decaux, CRW and Jim Wallar)
Volume V	- The Corporaciones Financieras (Robert Repetto & Ediana Harahap)
Volume VI	- The Agricultural Sector (Nabil Faltas & Santiago Rueda
Volume VII	- Institutional Development and the IBRD - main reference to transport and electric power (Nimrod Raphaeli & William Raiford)
Volume VIII	- Special Papers A. The Role of the IBRD in Education (Eleanor Levy) B. The Contribution of the IBRD to Urban Development (Jacques Roumani) C. Public Health & Family Planning & the IBRD (Stanley Johnson) D. Prices in the Operations Evaluation Study (CRW)
	2. Tires in the operations Evaluation Study (CRW)

This does not refer to the other report, also targeted for completion by July 31, reviewing the role of the IBRD in some seven power companies around the world, and under preparation by François Ettori & Nick Anderson. That report will consist of an Introduction, a chapter about each power company and a Conclusion and Recommendations.

cc: Mr. McNamara (through Mr. J. H. Adler)

Mr. Adler
Mr. Blaxall

Messrs. Landau Ettori Paulson Anderson Wallar

Misses Levy Mulin Harahap Institution - A viable, autonomous organization accepted by its environment

O Organization

1 Institution maintenance

2 Reorganization Major day, in Osg dark

3 Creation of new units

4 Elimination of redundant units

5 Personnel

a Increase staff

b Training

Salaries

B

F

Finances

Planning and Resource Allocation

11 Contract - awarding, local contracting

14 Supervision, standard maintenance

21 Autonomy, taxes, tariffs, earmarking

13 Consultants, Foreign Advisers, Technical Assistance

22 Accounting, control, supervision, internal authorized

Organizational Efficiency

Bank-Client Relationship

12 Competitive bidding

- 23 Independent auditors
- 24 Budgeting, setting of internal financial targets & monitoring them.
- 25 Commercial policy
- 26 Technical Management Reporting
- E Environmental Approval
- 31 Relationship to other government institution/private corporation
 - 32 System maintenance and improvement
 - 33 Sociopolitical integration
 - 34 Political activity
- M Maintenance

Elements

Commercial Dept. Financial Plg. Cash Flow Forecasts Maintenance Org Internal Auditing External Auditing Personnel Policies Salary Levels Mgt. Reporting - technical Admni School Billing Inventory-Mgt.

Techniques

Foreign Consultants Local Consultants Individual Consultants Training Programs Commitment to act before .. (e.g. 1 year) is info. Foreign Training

Implementation

Negotiation Joint Learning Insistence

Also stage beyond:

External effects - e.g. use of Medellin Training Program for people from other utilities

des Files - Dans 2 mis, eare un meno su réorgant ations Visiter les usines lu Braziles durant le meets - end du 3 au 5 Amil. Ash a copy for lotter to KESG. (for Chis) Appeler Husain et Area Asian Deptito Tables:

Ret in table I column for growth rates between year columns. - Crevall Plant factor: pen significatif. - Fransmission capacity: à Joine sante. Sans signification, - Attention sur "Constances" companées aux " consumers" Customer = 1 commer with a given taiff from ta). Le par oublier : de faire la mayenne des Fixed Assets in operation. Ve pasoublier Anerage. - Capacity out of service: enlew dy seasons factor-- Energy spilled out: attention our raisons. Table I & - Managament midicators: put more emphasis. Conloter un peu les viclicateurs techniques pairedents - Managemen midications: - Billing lag - Attention aun losses. Accounts receivable.

Self-financing.

Not Internal cash Generation: add Horses to miceg. eather midirect or direct. (et midicatem ama des définitions différentes dans I et II-B. Dans I, micq. Comprend les tarces. Dans II-B, non. (- Customers contributions should be deduced from Sissed assets and from n.i.c.g.

Appeler table III colle qui jugn'air s'appelent II-C.

Tanif convenants: vérifie les termes du cervenant et calcular les mêmes midicateurs. - Load Forecasts: the important pour les comparisons forecast/actual

Casts of Projects: Reconvertin (de les cas d'inflation) les contre en l.c. este la valeur en l.c. a l'année de dépont des construction et ensure senle en convertin en Boar tourn officiel de change. Utiliser un tourne d'inflation de le pays.

ARGENTINA

SERVICIOS ELECTRICOS DEL GRAN BUENOS AIRES S.A. (SEGBA)

Some Important Indicators - 1969

TO CT A CO	T
PART	
TUTTE	-

PART I	
Reflecting Characteristics of the Utility	
Thermal generation as % of total energy generation	100%
Average growth rate of energy sales in the last 4 years	9.4%
Annual load factor	58%
Industrial energy sales as % of total energy sales	31%
Average Consumption per consumer in kWh	2,866
	US¢33
Average fuel cost per million Btu	US\$529
Total Investments per kW installed capacity	44%
Debts as % of total capitalization	
PART II	
Reflecting Efficiency of the Management	-1 1 <i>d</i>
System loss as % of total energy sent out	14.4%
Average thermal efficiency of plants	30.5%
Average revenue per kWh sold to all consumers	US¢2.8
Average revenue per kWh sold to residential consumers	US¢3.1
Average revenue per kWh sold to industrial consumers	US¢2.5
Average overall O&M expenses per kWh sold	US¢1.6
Operating ratio	70%
Return on average net plant in service	8.2%
	49.8%
Net internal cash generation as % of capital expenditure	* 89
Consumers per employee	255
Energy sales per employee ('000)	-

Possible histophical Efficiency Indirators System kwh losses_V Cost per kun receivable bills / total bills. - Outstandings - receivables : - Proling delays. - Financial rates of return. - Plant thermal efficiences. - Distribution ontages V: Kra out x time out belative to total Kva transformer cap Jelays on making new connections. (Efective Peak Capacity) Norme plate = installed capacity = capability

Firm capacity + Reserves = Capability

Institutional Building. Parits of interest:

- Organization and procedures (contracts, consultants, person nel, salaries, competitive bidding) - Fruction of Board, Depolitization of Management and Board. - Accounting - Tailfo, Firmuial autonomy. - Maniterance - Consultants, Training programs

Jans de la Banque.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL DEVELOPMENT - Hydramlique mystams: Stochastic analysis of flows for aptimizing the size of dams. - Ower-capacity for equipment out of service: draw the distribution curve of capacity out of service m'order To see if averiment ment was made. Who of land produced /year Load Jaston (Jos Demand). Max. Peak Demand x Nbr of hours/your-Who of lawh moduled/year Plant factor: Capacity (mi Hw) x N br of homs / year. Nho of b.t.u. required for 1 kwh ~ 10,000 b.t.u. Heat rate: - International Research and Technology in Washington. (I.R.T.) - I physicist and engineer-economist, bothe specialized in power (studies for "Resources for the Future " Foundation). In late 50's and early 60's. Specialized were an projections and prospective.

- Identification of objectives of project - Auti-pollution effort. 6-10 pages on each utility: comments on tables I, II and III.

1 - Association between attility and Bank: organizational pour modèle & changes, financial amonts + consultants contracts, taniffs. 2 - Demand Forecasting un lan ×3 - Planning and Project selection (Pollition) apprecial 14 - Prayect construction and costs. (Accounting boundants) 155 - Financial: credit morthiners, liquidity, a wounting.

156 - Institutional development and building. deltainty report. 9- Houragement midicators) Iook at Ripman's paper on Praject Appraisal 1460 - Favilitity studies.
- Objetimes are also all recommendation and

X Own - The Management study was paid under loan Water Supply 450-SI XM,T - Lack of maintenance staff in 1966 (pera 15 of 473 SI) still does exist or wo? Was it harmful to PUB and its equipment? T _ In 1966, 3 of the 25 MW with in Paris Panjang A merestill long overdue for major overhands. How is it now? Were there some breakdown ? What has been the available aparity? Got X M - Effects and pressure of fuel and property tascan PUB financial property tascan published property tascan published property tascan published published property tascan published X ME Management and raturns of the suitam's fund? T _ Is installed capacity's high lavel above marcinum demand justified, or is there some space capacity? (Figures of actual available apaciting are uniportant to appraise this). Ma Help of Bank to DUB against high Hasies put by Gov.

Why so many frequent loans from Bank. Need was ugast?

F - This 3rd loan, very close to the 2nd, means financial position of PUB was morse than gorecast in 473-SI. What happened? - Import of shortage of exposioned senior stall on PUB stall aperations; history of replacement of expotriates - Lack of exporting.

- Lack of antherity delegations from Board Chamiman to General Manager - Was her really lad and unreliable?

- Consideration and implementation given to recommendations of the Management study. - Was the study on basic distribution planning recom mended by Bomb in 503-SI made as recommended? - Frinancial and logal aspects of suppliers credits for Jurong. XF - Taniff study financed by 503-5I = one all purpose, comple tion, recommendations and uniplementation; effect on the 2-meter system. - There is no problem concerning uncollected accounts ! (pora 6.03, p.15) X Own (4th loan) - Poor staff relations and lack of wondination between various Departments of two due to lack of effective Management.

- I a Gel Manager only for 3 years, from 1966 to July 1969 ! X Own

Organizational changes here been law, due mainly to shortage X Brun of experienced staff aggravated by opening of new sections. X Com - Fa Lavil vicease mi November 66. - heorganization of accounting system was completed by end X Omn 166 and greatly improved management of PUB. OF T X AN What was the Bank o position in the management of the similaring fund and in its sterling minestments to be converted nito Suizapore bonds? What means exactly "a net loss of \$\$ 5.3 million" (pona 3.20, p. 12 of 595-SI) as a result of sterling devaluation?
- Forevails of 503-SI for capital jurgroun of Electricity Dept T, F were, over 1969-1971: 3\$ 174.5 million, o.w. 75.7 for generation, 92.8 for distribution and 6 for unicallaneous. In 595-5I, this capital program is forecast to be 5\$ 207 million (56 generating, 146 distribution, 5 others). Reasons for minease and changes? - Did Bouls make any recommendations about need for XT langer-ranger planning of distribution in lieu of you by you my which was the PUB policy? I the annulant study on this point.

— Poor solonies offered are reason for lack of experienced serior staff? Did Bank help against Good for bowing Gove XMD these solaries in acased? _ Does Bank member offer higher prices thou non Bank men hers (East European countries)? What is PUB's eagrerieure in all his distensitional tenderings in this field? lack of gat personal in according Dyt reliand In general, lock - Relation mitle Consultant: PCR fuit establishing ST James,
Menz Mar Iellan short range planning and casts - Did Bank hugit! the Estrope - Reasons for extensions of closing dates of locus -- Technical question: - performances of free - piston " mit in ST James. - Maniterance and remian: units of P. P. A. trambles (capacity and of service

X F _ What is the Employee Provident Fund? Is it internal? X M - History of microses in electricity tariffs (1960, 1964, 1967). X M - What about the application for supplies to steelworks, sugar relinery and paper will, and intigation pumping men tionned in 330-44 for the Northern Zone? X M - Why NEB asked for a loan in 1966 when it is said in 350-MA that finances would be sufficient up to 1968? M - What about the lingh number of suplayer of NEB? Are They sufficiently paid fly to the market? - Is not there any overdimensionnies of hydro plants becan so of water shortege in dry seasons (capacity drops down to by about 20 to 30%)?

Companion potmeen inestments with Bank help and without Bank help and with the seasons of the seasons o - "Upper Perala Danelopment" scheme development and
Bank position.

- Use of averdraft facilities in 63/64 and 64/65 to finance
transmission innestments, which led to cash shortage. What is because all niternal resonner were devoted to generation winestments, and none left for other winest mants, or was it because other lang-term lonowing was not possi ble became of loan agreement coverants an nicomence of lang-term debt? a became distribution minestments mers higher than expected.

- Financial obligations of NEB forwards Government: payment of dividends. - WEB stated policy is to produce 8% return and finance 40% of capital requirements - was this ochways fulfilled and, if not, why not? Are all capital and stock subscriptions made by Government, either state or federal? Is also the Batang Badang issue of stock subscribed by Government?

X M - Tariff changes: in 1964, bails & - In 1967, special lants
for midinties: high or low? Conclusion of the starts
tridy: are started high or low? If high, could be the reason for good financial performance, despite high emply - Campanian of férancial cost of Paule loans with the foreign or damestic loans -- Bilateral financing of 579-14A: by whom, which from (suppliers' westets)? Was it seared and when? In line did Bank and WEB put so much emploses on Known al capacity development and did not look for further hypho sites? Was there a missientation ni jurgect studies ni early 60's due to Bank apinion? - Future ament position of NEB. - Bould contributions atility & F.X., lower must ment casts. - Bould contribution subility: - Hariffs revisions, outside mens, reorganization, staff reduction, menagement performance and advises. Degatine aspect on direct Ay of equipment purchased though niternational hid ding (what were the main equipment supplies?)? . Comments of NEB on Bank procedures and activity. - Did NEB Josed useful the Bentle's conenants? 1 End M - After 12 years, NEB mill be able to financing? - Rate of return on average net fixed assets, from 1956 to 1969: