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Folder ID: 30069310

Series: Records of the Director, Operations Evaluation Department

Dates: 01/01/1972 - 11/30/1972

Fonds: Records of the Office of Operations Evaluation

ISAD Reference Code: WB IBRD/IDA OPE-01-01

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The World Bank

1818 H Street NW

Washington DC 20433

Telephone: 202-473-1000

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85-0035-05

Operations Evaluation
Memos to Mr. McNamara (2-38)
January 1972 - November 1972



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Operations Evaluation - Memoranda to Mr. McNamara - Volume 2

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OFFICE MEMORANDUM

TO: Mr. R. S. McNamara (through Mr. J. H. Adler)

DATE: November 6, 1972

FROM: Christopher R. Willoughby

SUBJECT: Mr. Gutierrez's Comment on the First Audit Report

Along with final draft of the first audit report -- on the Bank's first highway project in Costa Rica -- which, incidentally, was distributed to the Board last Tuesday, October 31, 1972, after printing delays, I sent you a copy of a memo in which Mr. Edgar Gutierrez, commenting on the audit, suggested that it would be advisable to expand the terms of reference for audits and allocate more manpower, to enable collection of more evidence, better analysis and more operational recommendations. He expressed the view that "unless the objectives of the audit are expanded, it will serve only a very limited function, which may not justify the manpower spent in preparing it." In turn you asked whether we planned to take account of Mr. Gutierrez's comments in future audit reports. My response has been delayed by absence from Washington and preoccupation with production of another audit.

Mr. Gutierrez's view accords closely with my own, but we have very limited possibility to take account of it within the tight program for the current year and I think it may be a little early to reach firm conclusions about the experiments with project audits which we have been making, mainly over the last few months only. Partly in light of the converging views expressed by Messrs. Shroff, Tornquist and Wiczorowski at the Colombia report Board Meeting about the need for the Operations Evaluation Division to focus more on the performance of the Bank as such, I have been trying to steer audits beyond the narrow comparison of actual against forecast to more analysis of the efficacy and validity of the Bank's interventions. But the extent to which I can do this without placing intolerable burdens on our staff is obviously very limited. And I fear that the more recent audits which we have done, while again revealing weaknesses in the Bank's performance and suggesting some useful remedies, have not been able to carry analysis of many points far enough and have had even to leave aside entirely some important Bank decisions (eg. the debt limits chosen by the Bank for the Costa Rica power company and the frequent grants of permission to exceed them). The consequence has been less specific and useful lessons than would probably have been possible, despite the large amount of basic work that has anyway to be done.

To deal in a more productive way with these projects or others requires more experience on our part and large and more specialized manpower per project studied, as Mr. Gutierrez suggests. It would be rather presumptuous for us to suppose that we can deal adequately in 4 - 10 manweeks, as is presently allowed for an audit, with projects on appraisal and supervision of which the Bank has typically spent upwards of 100 manweeks.

President has seen

Mr. R. S. McNamara (through Mr. J. H. Adler)

November 6, 1972

- 2 -

Early next year you may wish to consider what should be done with Operations Evaluation after the current program comes to an end between May and August 1973. By March we shall have had several more months' experience with the various kinds of studies we are doing this year, and I think Mr. Gutierrez's suggestions should have an important impact on what we then plan.

cc: Mr. J. H. Adler
Mr. E. Gutierrez

OFFICE MEMORANDUM

TO: Mr. R. S. McNamara (through Mr. J.H. Adler)

DATE: October 2, 1972

FROM: Christopher R. Willoughby *CRW*~~CONFIDENTIAL~~SUBJECT: First Two Project Audit ReportsDECLASSIFIED
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Our first two project audit reports for loans which finished disbursement in 1968 were due to you on September 30. One, on highways in Costa Rica, has been ready for some time but I held it up in the expectation of having the other, on power and telecommunications lending in Costa Rica, ready on schedule. Completion of the latter has suffered a series of delays from different causes, and I have also now determined to give some other Departments a further chance to comment on it before we send it to you; I hope it will be ready for you by the end of this week.

Hence, for the present, I attach a copy of the audit report on the first highway loan to Costa Rica. This report has benefitted from comments received from the former Transportation Projects Department and Central America and Caribbean Department, as well as from Mr. Baum. With the report I am also sending for your information a copy of a memorandum from Mr. Gutierrez which, though its detailed comments relate to an earlier draft of our report, remains broadly valid.

You will recall that we left open the question of whether the reports would be distributed to the Board upon completion or later on in a group. I have discussed this with John Adler and we feel that the best approach might be to distribute the report now with a covering memo as attached and a 'Confidential' classification.

cc: Mr. Knapp
Mr. Aldewereld
Mr. Baum
Mr. Chenery
Mr. Adler

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TO: The Executive Directors

FROM: The President

SUBJECT: First Project Audit Report

I am attaching for information, a copy of a report "Summary Audit of Costa Rica First Highway Project" (IBRD Report No. Z-____, dated September 29, 1972). This is the first of the new kind of project audit reports which the Operations Evaluation Division has been asked to prepare, as noted in my memorandum of July 20, 1972 on the Future Work Program in Operations Evaluation.

I do not propose to put the attached report on the Board agenda, but should any Executive Director wish to have a Board discussion I would be glad to schedule it.

I expect to be forwarding to the Executive Directors from time to time over the next months further audit reports, of similar nature to the attached, on individual projects for which Bank loan disbursements were completed in 1968.

OFFICE MEMORANDUM

TO: Mr. Christopher R. Willoughby

DATE: September 7, 1972

FROM: Edgar Gutierrez

SUBJECT: Audit of Costa Rica Highway Project (Loan 299/Credit 10) - Some Comments

1. The audit presents a good review of the scope of the project's success and the major reasons for its shortcomings. The project, which as the audit correctly points out was more of a "highway program loan", was well chosen for a post-evaluation, for the lessons the Bank may learn in future feeder road projects. I fully agree with the three main operational conclusions, i.e. the need for the Bank to:

a. be more flexible in loan administration, being ready to introduce changes in project or provide supplemental financing;

b. give more attention to institution building, particularly maintenance organization and procedures; and

c. carry out better studies at time of appraisal, when estimating costs and benefits.

2. The audit is well written and clear, and provides a useful summary history and description of the project. However, it is weak, in my opinion, at the crucial stage of the "lessons" to be derived from it. I think that these lessons, in order to be useful to future Bank work, should be concrete, specific and candid. They remain instead, in this audit, at a level of generality which is not of great use. It would appear that, while considerable time and effort was spent comparing actual costs of and delays in project execution with appraisal report estimates, not enough time was devoted to identifying and analyzing in detail the causes of the discrepancies, indicating remedies for the future. The audit makes a number of statements which, if explained, might be instructive for future projects. For instance:

a. On page 4 the statement is made that one reason for the delay in project implementation was the failure to attract foreign contractors (apparently only one foreign contractor was interested in participating in the project). Why? Did this have something to do with the way the project was structured, with the bidding documents, inadequate advertising, some strange Costa Rican legislation which deters foreign contractors, etc.?

b. On page 5 the audit acknowledges that the appraisal report greatly underestimated the growth of road traffic in Costa Rica and on page 10 we are told that a major lesson of the audit is that such forecasts "must be based on more detailed and accurate studies than those used by the Appraisal Mission". This is very general, analogous to the statements one finds in economic reports that planning should be improved and public investment and taxes raised. One always hopes for something a little more precise and constructive - in this case, in relation to the appraisal techniques which were used.

c. On page 8 the audit raises the issue whether the project "was still of high priority in 1966 to 1968 when most of the works were carried out". It would seem that a major element of a post evaluation effort is exactly answering this question.

d. It is clear that the yearly supervision missions were inadequate in scope, but what changes can we introduce in our supervision system to make it more responsive to these problems?

3. In summary, this "experimental" audit is good as far as it goes, which is essentially a detailed factual report of what took place since the loan and credit were signed. It would, however, be advisable - in my opinion - to expand the terms of reference for these audits and allocate more manpower, which would permit collection of more evidence and better analysis, and would result in more operational normative recommendations. I think that unless the objectives of the audit are expanded, it will serve only a very limited function, which may not justify the manpower spent in preparing it.

cc: Messrs. Kuczynski
Lari
Dowsett/Chaparro

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✓ Mr Mc Namara	① - A 12 th floor
✓ Mr Knapp	② A 12 th floor
✓ Mr Alderfeld	③ A 12 th floor
✓ Mr Cheney	④ A 12 th floor
✓ Mr Adler	⑤ D 6 th floor
✓ Mrs Evans	⑥ A 513
✓ Mr Braxall	⑦ D 650
✓ Mr Alter (3 copies).	⑧-⑨-⑩- A 837
Wilkinson	11
Spake	12, 13, 14, 15.

Mr Lough

OFFICE MEMORANDUM

TO: Mr. R. S. McNamara (through Mr. J. H. Adler)

DATE: July 17, 1972

FROM: Christopher R. Willoughby *CRW*SUBJECT: Relation between Evaluation and Supervision in IBRD

Recently you raised the question of the relation between Evaluation and Supervision in the Bank and since I expect to be away next week at the time of the Board discussion of the paper on Project Supervision, I thought it might be useful to write down my thoughts on this subject.

The basic purpose of Evaluation is to audit and evaluate Bank activities to meet two needs: (a) accountability and (b) learning from experience. The basic purpose of Project Supervision is to help (a) to assure sound project execution and fulfilment of agreements and (b) to achieve fullest project benefits to the borrower.

There are numerous interrelations between the two activities. For instance audit/evaluation of Bank project lending activities involves evaluation of the borrowing entity's performance under the loan, which is also often undertaken by a Supervision/Appraisal mission preparing a report to support a so-called 'repeater' loan. Supervision generates some of the data required for Evaluation and to the extent that it is extended to cover the post-construction period and to carry out effective project monitoring, as proposed in the Supervision paper, it will do so to a much greater extent in the future. Most importantly, perhaps, Supervision has contributed crucially to the informal learning from experience that the Bank has been doing so effectively before systematic evaluation was introduced at all.

Where is the dividing line between Supervision and Evaluation? It might be thought to lie in the matter of timing -- Supervision carries a project through construction and early operation and Evaluation then takes over, at a time when project benefits are fairly fully visible -- but I do not think this is correct. It is a very open question whether accountability and learning from experience functions can best be served by confining Evaluation attention to old projects, with long operating lives and financed under out-of-date policies; I think the general tenor of the Board discussion of the Colombia report was to suggest that it was a bit too historical, amongst other things. The dividing line might be thought to lie in the difference between what the two activities seek to improve: specific projects in the case of Supervision, and Bank policies and procedures in the case of Evaluation. That distinction is more accurate, although it is not watertight since Evaluation may certainly suggest improvements in individual on-going projects and Supervision may certainly generate ideas for improvements in policies and procedures. But equally crucial with that distinction is that Evaluation must provide an independent view, under Management, of the effectiveness of procedures and policies and of possible ways to improve it, whereas Supervision is part of regular operations.

One of the Bank members of the McKinsey team even went so far as to tell me a few months ago that what Evaluation should really be doing is reviewing on-going projects in order to advise Management as to whether operating departments are being rigorous enough in enforcement of loan conditions, etc. I do not agree with this; I think we should be going less far, and yet further. Supervision itself is indeed one of the Bank activities to be evaluated, as we have tried to do in our reports to date. But standard policing is not our responsibility. We should be trying to take a broader, deeper view of the effectiveness of Bank operations. Yet within that framework we ought indeed to be increasing and strengthening focus on the Bank. This seemed to be the burden of several Directors' remarks last Tuesday: Mr. Wierzchowski's reference to 'Bank-client relations,' Mr. Artopoulos' to 'Bank efficiency,' and Mr. Shroff's to 'Are Bank rules right?', amongst others. This is not at all easy to do well, and audit of a borrower's performance is a necessary prerequisite to sorting out the effectiveness of the Bank. But clearly this means that all Bank operations, not only project loans and not only old loans, should be eligible for Evaluation; for example an Evaluation might be done in coming years on the effectiveness of the resident mission technique. Equally this means that the more the Projects Departments prolong their association with their projects, the better for the projects in my view.

OFFICE MEMORANDUM

TO: Mr. R. S. McNamara (through Mr. J. H. Adler)

DATE: July 14, 1972

FROM: Christopher Willoughby *CRW*SUBJECT: Board Paper on Operations Evaluation Follow-up and Work Program

I attach, for your approval, the short paper promised to the Board on Operations Evaluation, revised according to our discussion Tuesday afternoon, after last Board meeting.

I have been over the work program and schedules once again in light of our staff situation and have cut it slightly in view of recruitment delays that were not expected when I sent you the last draft two months ago. The description of the DFCs study is also corrected to take account of interim developments. I think that we should be able to stick to the schedule of report production now shown.

I presume that you do wish to keep the report target dates on the paper to be circulated to the Board. I would also draw your particular attention to item IV in the list of the work program: commitment to provide the Directors one year from now with a brief follow-up report on the Electric Power Study. I think this is in accordance with your wishes.

cc: Messrs. Knapp
Aldewereld
Chenery
J. H. Adler

OFFICE MEMORANDUM

TO: The Executive Directors

FROM: The President

SUBJECT: Operations Evaluation Follow-up and Work Program

DATE: July 14, 1972

As I mentioned at the Board meeting on July 11, I am submitting for your information a memorandum outlining (a) the planned FY 1973 Work Program of the Operations Evaluation Division and (b) the procedures we propose to adopt in follow-up of evaluation reports.

FUTURE WORK PROGRAM IN OPERATIONS EVALUATION

The Operations Evaluation Unit was established in the Programming & Budgeting Department late in 1970 and converted into a Division of that Department in the middle of 1971. In view of the novelty of the work to be undertaken, it started with a pilot phase. The main results of this pilot phase were distributed to the Executive Directors earlier this year: "Operations Evaluation Report: Electric Power" (IBRD Report No. Z-17, dated March 10, 1972) and "Bank Operations in Colombia - An Evaluation" (IBRD Report No. Z-18, dated May 25, 1972). These reports were discussed at meetings of the Executive Directors on April 4 and July 11, respectively.

As could be expected, the pilot phase of the Operations Evaluation Division's work has not produced sound procedures for evaluating the Bank's operations which now need only to be applied on a standardized basis. In some respects the reports have raised more questions than they have been able to answer. Nonetheless experience has been gained in the difficult methodological problems of evaluation, and the time has come to move into a second phase of work, still experimental, but initiating more systematic coverage of Bank projects. The second phase must also include the introduction of procedures for follow-up to the recommendations and suggestions which emerged in the studies undertaken in the first phase.

A distinction may usefully be drawn between 'Audit' and 'Evaluation.' In the work of the Operations Evaluation Division 'Audit' has come to mean comparison between the targets and projections contained in the project appraisal reports on the one hand and actual developments on the other, in order to see whether or not appraisal objectives were attained; if not, why not and if so, was it due to the project? 'Evaluation,' on the other hand, has come to mean a deeper analysis of the contribution to development made by the project and by the Bank in its support of the project, with a view to seeing not only whether the project met its assigned objectives but also whether these objectives were themselves correct in retrospect and whether they might have been improved in any way. Of the studies undertaken to date, the review of past power projects was mainly in the nature of an Audit, although it ran over to some extent into an Evaluation, while the review of Bank operations in Colombia was mainly an Evaluation. It can be argued that all Bank projects should be audited, but since even audit is quite costly it may be preferable to cover a sample in this way, while other projects, selected for the potential lessons they may yield, are subjected to evaluation.

The intended work program of the Operations Evaluation Division for FY1973, to be carried out by a professional staff of eight professionals together with consultants, includes audits, evaluations and follow-up studies. It is summarized in Annex I. It is envisaged that roughly 65% of total effort will be devoted to evaluations, 25% to audits and 10% to follow-up work.

As regards audits, a start is being made toward systematic coverage of all Bank projects. Two trial principles have been established for selecting projects for audit: (a) projects will be audited approximately five years after completion of loan disbursements and (b) where projects so selected belong to series of projects financed by the Bank (eg. a third loan to a power company, port authority or Government highway department) then the opportunity will be taken at the same time to audit earlier projects in the series and, in some cases, later ones too; hence the distinction drawn in Annex I between Audits of Individual Projects and Audits of Series of Projects. The further distinction between Summary and Detailed Audits rests on the fact that some projects are simpler and raise less problems than others. Projects have been selected for audit in FY1973, from among those for which loans were fully disbursed in 1968, considering feasibility of undertaking brief studies, availability of technically qualified staff in the Operations Evaluation Division, and the need for increased emphasis on transportation projects in view of the large amount of time devoted last year to electric power, the other main traditional field of Bank activity. It has not yet been decided whether it will be worth distributing small (2-5 page) reports summarizing the conclusions and recommendations, if any, emerging from each of these audit studies, estimated to take between two and three professional man-months, or whether it would be preferable to distribute all these brief reports in a package once or twice during the year.

In the area of evaluation, two major studies and one minor one are being planned. Completed highway projects in four different countries, located in different continents, have been selected for evaluation in a study which will focus particularly on the developmental impact of highway improvements on the region traversed, the degree to which this impact was affected by the competitive structure of the transport industry in the area, and other factors constraining or increasing positive developmental impact; the purpose is to identify possible ways of maximizing such impact. The second major study would be a review of the Bank's work with Development Finance Companies around the world, based mainly on study of selected companies with which the Bank began working at different periods and designed to identify suggestions for possible improvement in Bank

policies, practices and procedures in this important field of lending. Thirdly, in order to make a start in the field of education lending, a thorough evaluation would be made of one of the three secondary school projects for which loan disbursements were completed before the end of 1971; this study would include a survey of students' educational achievements and of graduates' contribution to meeting manpower needs. Reports on these three studies, which would be considerably shorter than the evaluation reports so far distributed and would confine themselves mainly to presentations of conclusions and recommendations with supporting analysis, are targeted for completion during the next 12-14 months.

The last part of the program consists of follow-up work on the recommendations and suggestions put forward for examination in evaluation reports. A few of the recommendations emerging from the studies so far undertaken raise policy issues; for these matters Policy Papers will need to be prepared by the staff of the Bank. Most of the recommendations however relate to application of policies already in existence and to the Bank's day-to-day practices and procedures in selection, preparation, appraisal and supervision of projects and in the preparation of reports. It is intended that, shortly after the Board presentation of an evaluation/audit report, these recommendations will be resubmitted to the Departments responsible for action on them, with a request for a reply within ten weeks covering, for each recommendation,

- (i) any implementation steps already underway
- (ii) a target schedule of steps required to implement recommendations with which the Department agrees
- (iii) reasons for rejection of any recommendations with which the Department disagrees.

The evaluation/audit report will be considered cleared and closed upon receipt by the Operations Evaluation Division of satisfactory responses along the above lines.

After closure of the evaluation/audit report the Operations Evaluation Division would continue to be responsible for monitoring the action taken in implementation of those recommendations which are accepted by the Departments concerned. About a year after completion of the report the Operations Evaluation Division will review the relevant work of each Department in the intervening period and, mainly on this basis, advise the President on the extent of action taken in connection with each recommendation and the reasons for lack of action where such is the case. Hence the program for the forthcoming year includes production of a follow-up report to the recent power study, which would include a short discussion against each of the numbered recommendations contained in the original report.

July 14, 1972

<u>Loan/Cr. No.</u> ^{a/}	<u>Name of Project</u>	<u>Disbursement Period</u>	<u>Amount</u> ^{b/} (\$ m.)	<u>Date of Report to Board</u>
<u>I. Audits of Individual Projects Against Appraisal Objectives</u>				
(a) <u>Summary</u>				
299/Cr. 4	Costa Rica Highways	1961-69	11.0	9/30/72
293	Trinidad & Tobago Power	1961-68	23.5	12/31/72
(b) <u>Detailed</u>				
306	Venezuela Expressway	1961-68	45.0	6/30/73
Cr. 63	Botswana Highways	1964-68	3.6	3/31/70
<u>II. Audits of Series of Projects against Appraisal Objectives</u>				
276/346	Costa Rica Power/Telecom.	1961-68	30.8	9/30/72
198/294	India - Calcutta Port	1958-68	50.0	3/31/73
<u>III. Evaluation of the Developmental Contribution of Projects</u>				
(a) <u>Education</u>				
Cr. 93	Kenya - Education I	1966-70	7.0	8/31/73
(b) <u>Selected Highways</u> (Developmental Impact & Transport Industry Structure)				
166	Ethiopia - Highways II	1957-63	15.0	6/30/73
135/195/Cr. 1	Honduras - Highways	1955-67	18.7	
341	Thailand - Highways I	1963-69	35.0	
344	Yugoslavia - Highways I	1963-66	35.0	
(c) <u>Development Finance Companies</u>				
A broad review of Bank activity in support of Development Finance Companies, with special emphasis on:				
240/422/459	Iran - IMDBI	1959-69	40.2	7/31/73
-	Korea - KDFC	1968-	-	
449	Tunisia - SNI	1966-71	5.0	
<u>IV. Operations Evaluation Follow-up Reports</u>				
1. Follow-up to "Operations Evaluation Report: Electric Power," IBRD Report No. Z-17, dated March 10, 1972.				8/31/73

a/ Shows only loans and credits already fully disbursed.

b/ Original amount of loans already fully disbursed.

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May 15, 1972

Mr. McNamara:

I promised you a note referring to the parts of the Report which you may want to read before the meeting now scheduled for Wednesday, May 17th at 5:30 p.m. The general thrust of the report is indicated in the following three parts:

- (a) the Preface (pp. vii-xv);
- (b) Overview of the Bank's Effectiveness (pp. 29-34);
- (c) Chapter X - Principal Operational Implications (pp. 182-189).

You may also want to look at the recommendations contained in the final section of each chapter other than the first and the last.

Since the Report now has nearly 200 pages and we do not have a summary as such (nor do I think we should have one), Chris has inserted a note pointing out the sections which the proverbial busy reader should concentrate on. I am not sure it should stay in, because it may be that some Executive Directors would take offense at the insinuation that they do not have to read the whole Report. At the same time I am also worried that they might read only the parts indicated and thus not get a full appreciation of the Report. May I have your view?

A handwritten signature in dark ink, appearing to be the initials 'JA' or similar, located in the lower right quadrant of the page.

OFFICE MEMORANDUM

TO: Mr. R. S. McNamara

DATE: May 15, 1972

FROM: John H. Adler

SUBJECT: Proposed Board Report on the Colombia Operations Evaluation Study

I attach a copy of the Operations Evaluation Division Report "Bank Operations in Colombia — An Evaluation" as we would propose to submit it to the Board at the end of this week.

The Report represents a modified version of a draft circulated on April 28 to Messrs. Knapp, Aldewereld and Chenery and all relevant Department Directors. It is slightly longer than that draft due to the various elaborations, reservations and fuller substantiations that we felt it necessary to add after consideration of the comments received on that draft.

Mr. Knapp suggested less assured reference to the problem of capital flight, and, after consideration, the Division decided to delete explicit reference to this topic. He also proposed that you should clarify to the Board that, by contrast with most others, the Reports of the Operations Evaluation Division are not cleared through official channels in the Bank, to ensure the independence of the evaluations.

Mr. Aldewereld said that he felt it would be out of place for him to comment on the evaluation report in view of his combined responsibilities for supervision of the Projects Departments and the Programming & Budgeting Department.

Mr. Chenery said that he had checked over the general sections of the report, that he felt it presented a balanced summary of the findings and his Departments' comments had been adequately taken into account; he did not think detailed suggestions would be appropriate since guidance from management should be kept to a minimum.

Mr. Chadenet drew attention to one or two sections he felt were obscure and suggested improvements in form, and we have tried to deal with his suggestions. Mr. Baum took the view that the Report was satisfactory except for the later, more critical part of the section now called 'Overview of the Bank's Effectiveness' (pp. 29-34) which he felt to be rather harsh. Mr. Willoughby and I have been over this section in light of this and other related comments to recheck the validity of each point made and we have made a few minor changes, and adjustments in tone, to try to avoid any overstatement.

May 15, 1972

Mr. Alter sent us a long and most helpful memo pointing to a number of matters that he felt needed double checking or clarifying. He especially evinced concern about what he considered a more negative than warranted tone in Chapter I and the possible reaction of the Colombian authorities to it. He was also concerned about certain analyses and recommendations which he felt might give rise to Board objections to planned lending operations; in particular he referred to the forthcoming program and export expansion loan, future lending for the private industrial sector and the planned second loan for the Atlantico Irrigation and Land Reclamation project. We have considered these various matters, and the points raised in connection with each, with great care. The Division came to the conclusion that Chapter I, because one of its main purposes was to identify obstacles to development (so that it could then be seen how the Bank had contributed to relieving each), may well have turned out a little more negative than warranted. A major paragraph and numerous specific sentences were added to give a more balanced presentation and overcome misunderstandings of what had been said. On the other matters raised it was harder to make adjustments, other than specific clarifications or more reserved presentations, since the analyses underlying the Report had led to certain conclusions about past Bank operations, and part of these could not in honesty be omitted. Mr. Alter raised many substantive points in counter-argument to some of the conclusions. After discussing these points in detail with Mr. Willoughby, I have concluded that on some we simply disagree with Mr. Alter, in other cases there had arisen misunderstandings recurrence of which we have tried to prevent by adjusting the text, and in yet other cases the points were not directly relevant to the review although they may well be appropriate in demonstrating to the Board why the Bank proposes further actions either apparently or actually inconsistent with the conclusions and recommendations of the Report. I realize that the criticism levied against some of the projects reviewed may make it more difficult for Mr. Alter to satisfy the Board regarding the appropriateness of further loans for the same or similar projects in Colombia; but I am confident that he would be able to deal with the Report's comments in the arrangements for the loans in question and to make that clear to the Board in the accompanying presentation.

Mr. Diamond sent you a copy of his comments on the draft, and adjustments have been made to try to avoid the 'over-writing' which he found in some places and to clarify sections where the view expressed in the Report had been misunderstood or might be misunderstood by Board members.

As regards the individual Projects Departments, I understand that the presentations in the Report are fully acceptable to Messrs. Fuchs,

Ballantine and Kanagaratnam; very nearly so, if not completely to Mr. Knox; and reasonably so for Mr. Weiner; we received useful comments from several of them which have been fully taken into account in revisions. Mr. Evans, on the other hand, has continued to object in the strongest terms to our analyses. On receipt of Mr. Evans' comments on the latest draft Mr. Willoughby went through the analyses underlying the agricultural chapter once more in great detail. He has concluded that these analyses are accurate, to the best of his ability and that of his colleagues, and give a fair presentation of the Bank's action in the agricultural field through early 1971 when the study was made. To try to avoid any possible misinterpretation or misunderstanding certain parts of the agricultural chapter (Chapter VII) have again been substantially rewritten and the footnote (on page 126 of the Report) has been adjusted to present more fully what we understand to be the Agricultural Projects Department's principal objections to our analyses.

Mr. Nurick and members of the Legal Department also read the draft and made helpful verbal comments. One question was whether the Board version should continue to refer by name to consultant firms, especially those about whom critical remarks are made -- principally Madigan-Hyland (railways), to a lesser extent Koppers Co. (Paz del Rio Steel Mill), and in more minor key various others. Our preference, for simplicity and clarity, was to retain the references by name. Mr. Nurick advised us that he considered this satisfactory, although he was further checking Colombian law of libel to firm up his opinion.

In general I should make it clear that we have not, in this Report, introduced roundabout ways of saying things as we did in the earlier power report. I felt it was that that gave rise to the explicit accusation from Mr. Wiczorowski of a 'whitewash' and to similar insinuations from various other Executive Directors.

On the other hand some Executive Directors expressed concern that the power report should not be given too wide circulation and particularly not circulation outside circles familiar with the broader context of our work. In view of this and the somewhat more controversial nature of the present Report we propose to retain the 'Confidential' classification on the Report instead of the 'Restricted' classification given the power report.

No doubt, in initiating the discussion of the Report at the Board (now scheduled for July 6), you would want to make clear that it does not carry your imprimatur.

We expect to provide you a memorandum on the future work program of operations evaluation on Wednesday, May 17.

Mr. R. S. McNamara

- 4 -

May 15, 1972

In accordance with the instruction from Mr. Knapp I have arranged a meeting in your office for Wednesday, May 17 at 5:30 p.m., to be attended by those listed below and myself, so that they may give you their views on the Colombia study.

cc: Messrs. Knapp
Aldewereld
Chenery
Alter
Evans
Willoughby



OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: March 10, 1972

FROM: John H. Adler

SUBJECT: Operations Evaluation Report: Electric Power

I attach, for your comments and approval, a copy of the Board version of the Operations Evaluation Study on Electric Power. This report was circulated on February 24 to all those principally concerned, particularly Public Utilities Projects Department and relevant Area Departments, and it has since been revised in light of comments received. We do not expect to receive further comments from the operating departments except on the sections referring to Colombia from the South America Department, which was unable to meet our earlier deadlines for comments due to Consultative Group meeting, work on the possible program loan, etc. We expect to receive their comments Monday or Tuesday of next week and hence will still have time to make minor revisions, if such seem necessary, before the report goes to the Print Shop.

We should like to circulate the document to the Board as soon as possible and not later than March 21, with a view to discussion, as scheduled, at the Board meeting on April 11 (unless you would want to change the date in view of your expected absence). We would propose to circulate it with a white cover of the same design as now presented.

I am sending this note, with copies of the report, also to all Members of the President's Council for their comments.

I would like your approval of the report and schedule proposed.

cc: President's Council
Mr. W. Clark
Mr. Weiner
Mr. Willoughby



OPERATIONS EVALUATION REPORT: ELECTRIC POWER

Summary and Conclusions

I. Introduction

PART I - Seven Major Borrowers

- II. SEGBA - Argentina
- III. Furnas - Brazil
- IV. EELPA - Ethiopia
- V. VRA - Ghana
- VI. NEB - Malaysia
- VII. CFE - Mexico
- VIII. PUB - Singapore

PART II - Power in Colombia and the IBRD

- IX. The Power Sector in Colombia
- X. Bogota Power Company (EEEB) - Colombia
- XI. Medellin Power Company (EPM) - Colombia
- XII. CVC/CHIDRAL - Colombia
- XIII. The Colombian Transmission Interconnection

PART III - The IBRD in Electric Power

- XIV. Comparative Performance under the Loans
- XV. Institutional Development in Electric Power
- XVI. Power Tariffs and Tariff Structure
- XVII. Alternative Means of Foreign Financing
- XVIII. The Need for a Broader View
- XIX. Recommendations

November 30, 1971

Operations Evaluation Study of
Highway Projects

Study Proposal

Introduction

1. Through FY 1971, the Bank Group has lent \$3.0 billion, or about 15 per cent of its total lending, for highway construction. In the next five years (FY 1972-1976) it plans to lend an additional \$ 2.1 billion. The issues related to selection, composition and appraisal of highway projects are, then, of primary importance for Bank operations. For these reasons, we propose to undertake a comparative ex-post evaluation of selected highway projects financed by the Bank in the past.

Objectives and Scope

2. The broad objectives of the study are to assess the impact of Bank-financed highway projects on the development of the countries concerned and to learn from experience how to improve Bank lending in the highway sector. Because of the vast scope of the subject and its complexity, we propose to make a start by selecting a small number of roads, concentrating on a few issues which the Transportation Projects Department has considered to be of special importance and thereby developing approaches which could subsequently be extended to further projects and countries. The study will have three major parts:

- a) a conventional reappraisal of each of the projects selected, including aspects such as the calculation of an ex post internal rate of return, estimated and actual construction costs and reasons for delays and cost overruns.
- b) study in as much detail as possible, within reasonable time constraints, of three issues: the impact of each road on regional development; the distribution of the benefits among the different groups in the population and the role of the trucking industry in that distributive process; and the impact of road-rail competition, when applicable.
- c) review of the final influence of the Bank loan conditions, especially in relation to institution building, and the Bank influence in shaping each of the projects, that is, in which way the project was different as a result of the Bank's involvement.

Some other aspects of highway projects, such as contracting procedures, procurement and consultants' performance, will also be analysed but will not be the subject of special studies. Design standards will not

be evaluated, because the Bank is already undertaking a major study on the subject. The emphasis of the study will be on the comparison among countries and not so much on the individual characteristics of each project.

Selection of Projects for Evaluation

3. Given the large number of Bank highway projects, we have to limit our study to a small sample. The basis for selection was the full list of 162 Bank Group-financed highway projects from FY 1947 to FY 1971. A first selection, considering only trunk road projects signed before FY 1965 and including only one project per country, reduced that list to 26 projects (See list in the Note to Annex 1). We decided to concentrate only on projects containing trunk roads (main highways), excluding feeders, toll roads and expressways, to have comparable investments and to analyse the type of roads which have been and probably will be the most important in Bank highway lending. We considered only projects signed before FY 1965 because we wanted to evaluate roads that would by now have been in their operating phase for a few years. Finally, we limited the selection to one project per country to include as many countries as possible. Out of the preselected 26 projects, we selected 10 for which studies could be done (taking account of availability of data and on-going Bank relations with countries).

4. The next stage was a review in some detail of these 10

projects, analysing their main objectives, their implementation and main points of interest. Annex 1 summarizes the results of our investigations. Still these 10 projects included 66 roads, and given the proposed scope of the evaluation we could only select eight roads to make the study feasible, within the present staff and time constraints. We therefore decided to select four projects and two roads in each. The four projects finally selected were Loan 166-ET of 1957 to Ethiopia; Loan 268-ME of 1960 to Mexico, Loan 341-TH of 1963 to Thailand and Loan 344-YU of 1963 to Yugoslavia. We chose these four projects because they were in four large and important countries, each in different continents, where the issues we were interested in were particularly relevant: i.e. mainly, the expected development impact (according to appraisal reports) and the structure of the road transport industry (availability of data).

5. Two of these projects were made to finance a large number of roads. The one in Mexico included 13 and that for Ethiopia eight. Once these four projects for evaluation were chosen, we selected two roads in each project, based mainly on their expected development impact (according to appraisal report). The evaluation effort will be focussed on those eight roads.

6. Annex 2 contains a summary of the characteristics of the four projects and Annex 3 of the eight roads selected. The maps at the end of this proposal show the location of these roads in each country. The two roads in Ethiopia were supposed to have an impact on agricultural

production, one of them especially on coffee exports, and the project included a sizable effort to train the Ethiopian staff in the Highways Department. The Mexican roads were justified mainly in terms of increased agricultural production, but the road from Compostela to Puerto Vallarta has had an interesting effect on tourism, not foreseen at the time of the appraisal. The highways in Thailand and Yugoslavia were justified mainly in terms of savings in vehicle operating costs, but one of the roads in Thailand was supposed to have had an impact on rubber exports, and the Adriatic Highway (Vodice-Bar) in Yugoslavia has had a spectacular effect on tourism, mentioned but not quantified at the time of the appraisal.

7. An additional reason for selecting the project in Yugoslavia is the fact that everything went according to schedule and no cost overruns or delays at any stage took place. We want to study the reasons for such a good performance and contrast them with the reasons for delays and cost overruns in the other projects.

Methodology

8. The main unit of analysis will be the roads selected for evaluation and not the projects as such, which in many cases contain several roads in different parts of a country. The calculation of the ex post internal rate of return will be done through conventional methods, based on estimates of vehicle operating costs and time savings already existing in each country, and without attempting an application of a highway simulation model, as was done in the Colombia study, since

it would entail a very large effort in terms of time and resources. The only possible exception could be Thailand, where efforts to apply a model of that nature are already under way.

9. The main effort will be directed to assessing the impact of the roads on the region served by them, including the distribution of benefits among the different groups of the population. This assessment will require special regional studies for each of the roads selected. Many of the roads raise some special issues in relation to their development impact: for example, tourism in Yugoslavia and Mexico, rubber production in Thailand, and agricultural development in Ethiopia. We propose to subcontract part of these studies with university groups in each country, an approach that we consider more useful from several points of view than the use of consultants. The analysis of the distribution of benefits also requires a rather detailed analysis of the trucking industry, in aspects such as pricing, regulation and structure of services. This information seems to be available, in general, in the four countries selected, but it will probably be necessary to carry out special investigations in relation to the trucking activities on the roads selected for evaluation. The issue of road-rail competition is fully relevant only in the case of Thailand and partially in Yugoslavia. In this respect, the Thailand case will be an extension of the reappraisal carried out in the Economics Department of a railway project in that country.

10. A special study will be attempted of the final impact of some of the loan conditions and of their gestation and negotiation at the time of the loan. The emphasis will be on institution building conditions, and probably the effort will be largely concentrated on the case of the improvements in the structure and operations of the Ministries of Public Works and on the training efforts attempted in connection with the loans to Ethiopia and Thailand. The full analysis of this problem will almost surely require extension of the study beyond the limits of the project selected for evaluation, to be able to appreciate the evolution and impact of these institution building efforts over a reasonable period of time.

11. Annex 4 contains a summary of the points to be treated in the evaluation of each of the four projects selected. In the comparative analysis that will follow the completion of each of these separate studies, we also plan to include the conclusions on highway investments obtained in the Colombia study, but without attempting further work on that country.

Staff Requirements and Timing

12. Preliminary estimates, based on an assessment of the amount of time that would be needed to deal with each of the components listed in Annex 4, showed that each of the four projects will require one professional and one research assistant for a period of five to six months. This means that the study will take about ten months to be completed, involving two professionals and two research assistants. These estimates

assume that a substantial portion of the analysis of the development impact of the roads will be subcontracted with universities in each country, or with a consultant, if that proves to be impractical. The nature of the effort to be made to evaluate the institution building components of the projects in Ethiopia and Thailand has not been fully assessed, but it will probably require another professional for three or four months.

13. We propose to begin the study immediately with a preliminary phase concentrated in Thailand, and to initiate work on the other three projects in January, 1972. This approach means that the study will be completed by October, 1972. The reason for choosing Thailand is the availability of a sizable amount of data collected in relation to the previous reappraisal of a railway project and the existence of several useful contacts among Thai authorities.

Budget

14. The study will require 24 professional man-months and 24 man-months of research assistants. Including the possibility of subcontracts with universities and travel expenses, a cost estimate of the study is as follows:

24 man-months professional	\$
at \$2000 per man-month	48,000
24 man-months research assistants	
at \$1000 per man-month	24,000
University contracts and consultants	50,000
Travel expenses (2 trips per country, at \$ 2000 per trip)	16,000
Contingencies	<u>12,000</u>
Total	<u>150,000</u>

ANNEX 1

THE 10 PRE-SELECTED HIGHWAY PROJECTS

	ARGENTINA	COSTA RICA	ECUADOR	ETHIOPIA*	INDIA	IRAN	LIBERIA	MEXICO*	THAILAND*	YUGOSLAVIA*
A. Bank's Participation in Highway Sector:										
1. Number of Loans	3	2	3	4	1	5	1	6	4	5
2. Total Amount of Loans ^{a/}	141.0	26.7	40.0	54.7	60.0	173.0	4.25	176.8	123.0	150.0
B. Pre-Selected Highway Project:										
	1st	1st	2nd	2nd	1st	2nd	1st	1st	1st	1st
1. Basic Data										
Loan (or Credit) Number	288-AR	299-CR	176-EC	166-ET	(3-IN)	381-IRN	368-LBR	268-ME	341-TH	344-YU
Date of Loan Agreement	JUN 61	OCT 61	SEP 57	JUN 57	JUN 61	JUN 64	JAN 64	OCT 60	JUN 63	JUN 63
Effective Date	JAN 62	MAY 62	JAN 58	DEC 57	AUG 61	NOV 64	MAR 64	SEP 61	JUN 63	JUL 63
Original Closing Date	DEC 65	APR 65	DEC 61	JUN 61	MAR 65	MAR 68	JUN 67	MAR 65	JUN 68	NOV 63
Actual Closing Date	FEB 69	DEC 67	JUN 63	JUN 67	JUN 67	SEP 69	JUN 69	DEC 66	APR 69	JUL 66
Date of Completion of Project	FEB 69	JUN 71	FEB 69	MAR 66	DEC 67	SEP 69	MAY 69	DEC 68	SEP 69	JUL 66
Original Amount of Loan ^{a/}	48.5	11.0 ^{b/}	14.5	15.0	60.0	18.5	3.25	25.0	35.0	35.0
Amount Cancelled (or Supplement) ^{a/}	17.5	0.95	0.0	0.0	0.53	1.8	(1.0)	0.125	13.1	0.0
Original Cost Estimate of Project ^{a/c/}	110.0	16.7	32.1	37.8	77.0	44.2	4.55	68.6	62.6	98.0
Actual Cost of Project ^{a/}	n.a.	n.a.	n.a.	n.a.	104.0	n.a.	7.0	87.5	n.a.	100.0
2. Project Roads (Appraisal Report)										
Number of roads	10	15	4	8	7	4	2	13	3	2
Total length (Km)	2,600	670	525	1,200	1,050	680	100	3,150	630	590
Main Objectives - Justification:	improvement of existing roads - savings in operating costs.	improvement of existing roads - savings in operating costs.	improvement of existing roads plus opening up of fertile land.	opening up areas with large agricultural potential.	improvement of the national highway system.	maintenance savings and reductions in operating costs due to upgradings and shortened distances.	80 km new road to develop a logging area - 20 km new road to shorten distances in major rubber area.	improvement and extension of the Federal Highway System.	savings in operating costs and stimulus to agricultural production.	completion of the two most important highways - Adriatic and Central.
3. Implementation (Supervision Reports)										
Overall delay (years)	3	6	7	5	3	1½	2	4	1	0
Major changes:	due to shortage of local funds, 800 km were cancelled from the Project.	program reduced to 510 km.	the completion of the 4 roads was included in the 3rd project.	replacement of 3 project roads by the lengthening of 1.	35% cost increases.	cancellation of one project road.	50% cost increases - no logging by the area's concessionaire.	27% cost increases - addition of 8 access roads (110 km).	program reduced to 330 Km.	no major changes.
4. Common Points of Interest (XXX)										
Design Standards			XXX	XXX			XXX			
Procurement and Construction Method	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Traffic Counts and Composition	XXX			XXX	XXX	XXX		XXX	XXX	XXX
Trucking Industry				XXX		XXX		XXX	XXX	XXX
Rail Competition	XXX	XXX			XXX	XXX		XXX	XXX	XXX
Development Benefits			XXX	XXX	XXX		XXX	XXX	XXX	XXX

a/ All amounts are in millions of US dollars.

b/ Of which US\$ 5.5 million from IDA (Credit 10-CR)

c/ Including contingencies.

Note: 26 Bank Highway Projects met the criterion of selecting only "trunk road projects signed before FY 65 and one per country." The above 10 projects were pre-selected after eliminating the 16 others on "country" grounds (relationship with Bank and geographic distribution). These 16 projects were in the following countries: Chile, Colombia, Congo K, El Salvador, Guatemala, Honduras, Israel, Nicaragua, Niger, Pakistan, Panama, Paraguay, Peru, Spain, Tanzania and Uruguay.

Source: Appraisal and Supervision Reports.

*These are the four highway projects selected, on which further details are given in Annexes 2 and 3.

ANNEX 2

THE 4 SELECTED HIGHWAY PROJECTS

	ETHIOPIA	MEXICO	THAILAND	YUGOSLAVIA
A. Country Basic Data				
1. 1970 Population (million)	25	50.5	37.7	20.5
2. 1970 GNP per capita (US \$)	63 ^{a/}	654	150 ^{a/}	625
3. 1961-65 GDP annual average growth ^{b/}	4.4	7.6	7.3	7.1
4. 1966-70 GDP annual average growth ^{b/}	4.5 ^{c/}	6.9	8.9	4.6
5. 1970 Manufacturing output (% GDP)	12.0	19.9	14.8	32.3
B. Bank Participation in Transport Sector ^{d/}				
1. Highways: number of loans ^{e/}	4	6	4	5
amount (US \$ million)	54.7	176.8	123.0	150.0
2. Railways: number of loans	-	1	3	3
amount (US \$ million)	-	61.0	37.0	155.0
3. Ports: number of loans	-	-	3	-
amount (US \$ million)	-	-	23.0	-
C. Selected Highway Project: Main Components ^{f/}				
	166-ET	268-ME	341-TH	344-YU
1. Road construction and improvement	construction of new all-weather roads (850 Km) and improvement of existing ones (350 Km)	construction of new Federal highways (2,700 Km) and reconstruction of existing ones (450 Km)	construction of new primary national roads (78 Km) and improvement of existing ones (550 Km)	completion of the Adriatic Highway (420 Km) and the Central Highway (170 Km)
2. Road maintenance	maintenance of the highway system during 3 years	maintenance of the project roads	purchase of maintenance equipment	-
3. Detailed studies	survey and engineering of 1,000 Km of roads	-	engineering and economic studies of 1,034 Km of roads	-
4. Training of Staff of the Department of Highways	training of Ethiopian staff	-	training of Thai staff	-
D. Selected Highway Project: Government's Agreements				
1. "Standard" agreements	to award all construction contracts through international competitive bidding, to build roads to design standards satisfactory to the Bank, to promptly provide or cause to be provided adequate local financing, and to employ consultants satisfactory to the Bank			
2. Organization and Management	to cause IHA ^{g/} to have organization and management such as to carry out the project efficiently	-	to reorganize the Department of Highways along the lines of the PAS ^{h/} recommendations	-
3. Road Use and Maintenance	to maintain fully and adequately all national roads at all times after 1960, and to adopt and enforce appropriate motor vehicle regulations	-	to appoint consulting engineers acceptable to the Bank to help draw up and implement an adequate future highway maintenance program	to maintain and repair the project roads adequately and to ensure their proper use
4. Others	to postpone or eliminate first, if necessary, the road Shashamanna - Soddo as being of lower priority than the others	-	to arrange for the collection of statistics relevant to the economic and technical aspects of the 8 - year highway development program	-

a/ 1969

b/ in constant prices

c/ 1966-69

d/ as of June 30, 1971

e/ of which 2 credits from IDA amounting to US \$ 21.2 million

f/ original components (at the end of the negotiations)

g/ IHA (Imperial Highway Authority) was created under the first highway loan to Ethiopia (1950); the third highway project (1963) provided for consultants' services, and the fourth highway project (1967) required the reorganization of IHA according to those consultants' recommendations.

h/ PAS (Public Administration Service) is an U.S. consulting firm, which made a study of the organization and administration of the Thai Department of Highways, under the auspices of USAID in 1962.

ANNEX 3

SELECTED PROJECT ROADS

	ETHIOPIA		MEXICO		THAILAND		YUGOSLAVIA	
	BLUE NILE -BURIE	JIMMA -AGARO	PINOTEPA ESCONDIDO	COMPOSTELA -VALLARTA	CHIENGMAI LAMPANG	PATTANI -NARADHIWAT	VODICE -BAR	BELGRADE -PARACIN
A. BASIC DATA								
1. Date of Beginning of Works	DEC 60 ^{a/}	DEC 60 ^{a/}	SEP 61	SEP 61	SEP 65	JAN 66	NOV 63	NOV 63
2. Date of Completion of Works	DEC 64	DEC 63	JAN 68 ^{a/}	DEC 68	SEP 69	FEB 68	JUL 66	DEC 65
3. Construction Time (Years)	4	3	6	7	4	2	3	2
4. Overall Delay (Years)	3	2	4	4	2	0	$\frac{3}{2}$	0
5. Original Cost Estimate ^{b/ c/}	4.07	0.68	3.60	4.96	15.39	n.a.	61.4	24.0
6. Actual Cost ^{b/}	n.a.	1.24	4.88	7.54	11.36	5.45	69.5	22.9
7. Length (Km)	207	44	143	131	105	98	422	153
8. Width of Surfacing (m)	6.0	6.0	5.5	6.1	6.5 ^{d/}	6.5	7.0	7.5
9. Width of Embankment (m)	8.0	8.0	7.0	8.0	11.5 ^{d/}	11.5	9.0	10.0
10. Design Speed on Flat (Km/h)	n.a.	n.a.	50	60	90	90	75	100
11. Loan Number		166-ET		268-ME		341-TH		344-YU
B. JUSTIFICATION (Appraisal Report)								
1. Direct Benefits	--	--	--	--		Savings in vehicle operating costs due to upgradings		road maintenance savings and reductions in vehicles operating costs due to upgradings
2. Development Benefits	Increased agricultural production (oilseeds, grain, pulses, hides and skins, some coffee and cotton)	Increased coffee exports	Increased agricultural production (corn, sesame, fruits)	Increased agricultural and livestock production (corn, beef)	Increased production of cash crops, livestock and timber	Increased rubber output	Increased agricultural and industrial production tourism promotion	promotion of exports and tourism
3. Economic Rate of Return (Only Direct Benefits)	--	--	--	--	9% Chiengmai-Lampoon(27Km)	17%	11%	15%
C. IMPLEMENTATION								
1. Contractors	IMPRESIT ^{e/} (Italy)	SOLEL BONEH (Israel)	various local contractors		VIANINI (Italy) MAEDA(Japan) MAHATHAI(Thailand)	HYUN DAI (Thailand)	various local contractors	
2. Main Reasons for delays	Soil movements (Viaduct)	Shortage of crushed stones	Increases in earthwork quantities and heavy damages caused by cyclones		poor performance of MAHATHAI	-	-	-
D. PARTICULAR POINTS OF INTEREST								
	IHA's ^{f/} new Board (1958) shifted the emphasis of the Project from the Jimma area to the Burie area: the Burie Road was extended to Lake Tana and Gondar.	upgrading from gravel to paved under 4th project in 1967	Influence of the near highly developed area of Acapulco	extension from Vallarta to Barra de Navidad (22Km) under 4th Project in 1970	Competition of the new road Lampoon-Lampang(78Km) with a parallel railway line	improvement of the road Sangkhla-Pattani deleted from the project	impact on balance of payments	Competition with parallel railway line

^{a/} Only Approximate Data^{b/} Amounts in million of US dollars equivalent (using exchange rates at the time of the appraisal - during the project implementation only the Yugoslav currency was devalued)^{c/} Excluding contingencies^{d/} The Section Chiengmai-Lampoon (27 Km) has slightly higher standards^{e/} Only the Blue Nile Gorge Road (39 Km) was built by IMPRESIT; the remaining was built by IHA's own forces^{f/} Imperial Highway Authority

-- No direct benefits mentioned in the Appraisal Report

Annex 4

Outline. Tasks Related to Each Project.

1. Background. The country's development and Bank participation.
 - a) Overall development pattern
 - b) Amount and nature of Bank lending and Bank relations with the country.

2. Background. The Transport Sector
 - a) Regulation and institutional framework
 - b) Investments
 - c) Traffic evolution
 - d) Intermodal competition
 - e) Bank participation in the sector. General view.
(investments and policy)

3. Road Transport
 - a) Evolution of institutional framework (more in detail)
 - b) Detailed investment pattern. Vehicles and infrastructure.
 - c) Pricing and regulation of services and infrastructure.
 - d) Vehicle operating costs.
 - e) Investment financing and Bank participation in road transport (with some detail)

4. The Trucking Industry (at Sector Level)
 - a) Organization and ownership
 - b) Pricing
 - c) Structure of services

5. History of the Project

- a) Initial negotiations, selection of roads
- b) Project preparation. Detailed studies. Appraisal
- c) Negotiations. Government's proposal and Bank's modifications. Issues raised during negotiations.
- d) Loan Agreement. Final conditions. Description of the project.
- e) Project implementation (probably focussed on the roads selected for detailed analysis). Summary of main difficulties encountered and issues raised during construction: procurement, consultants.

6. Costs and Schedules of Selected Roads.

- a) Forecast and actual costs. Reasons for cost overruns.
- b) Forecast and actual construction schedules. Reasons for delays.
- c) Disbursements

7. Direct Benefits of Selected Roads

- a) Traffic evolution
- b) Savings in vehicle operating costs and road maintenance
- c) Time savings and reduced losses.
- d) Benefit - Cost Analysis

8. Development Impact of Selected Roads

- a) Description of the road's area of influence
- b) Increases in production attributable to the road
(unused resources and better use of existing resources)
Impact on employment and balance of payments
- c) Reasons that reduced the road's potential impact.
Bottlenecks in other sectors. Institutional rigidities.
- d) Comprehensive benefit-cost analysis

9. Distribution of Benefits for selected roads.

- a) Proportion of benefits passed to the user
- b) Proportion of benefits presumably received by producers and consumers
- c) Influence of marketing

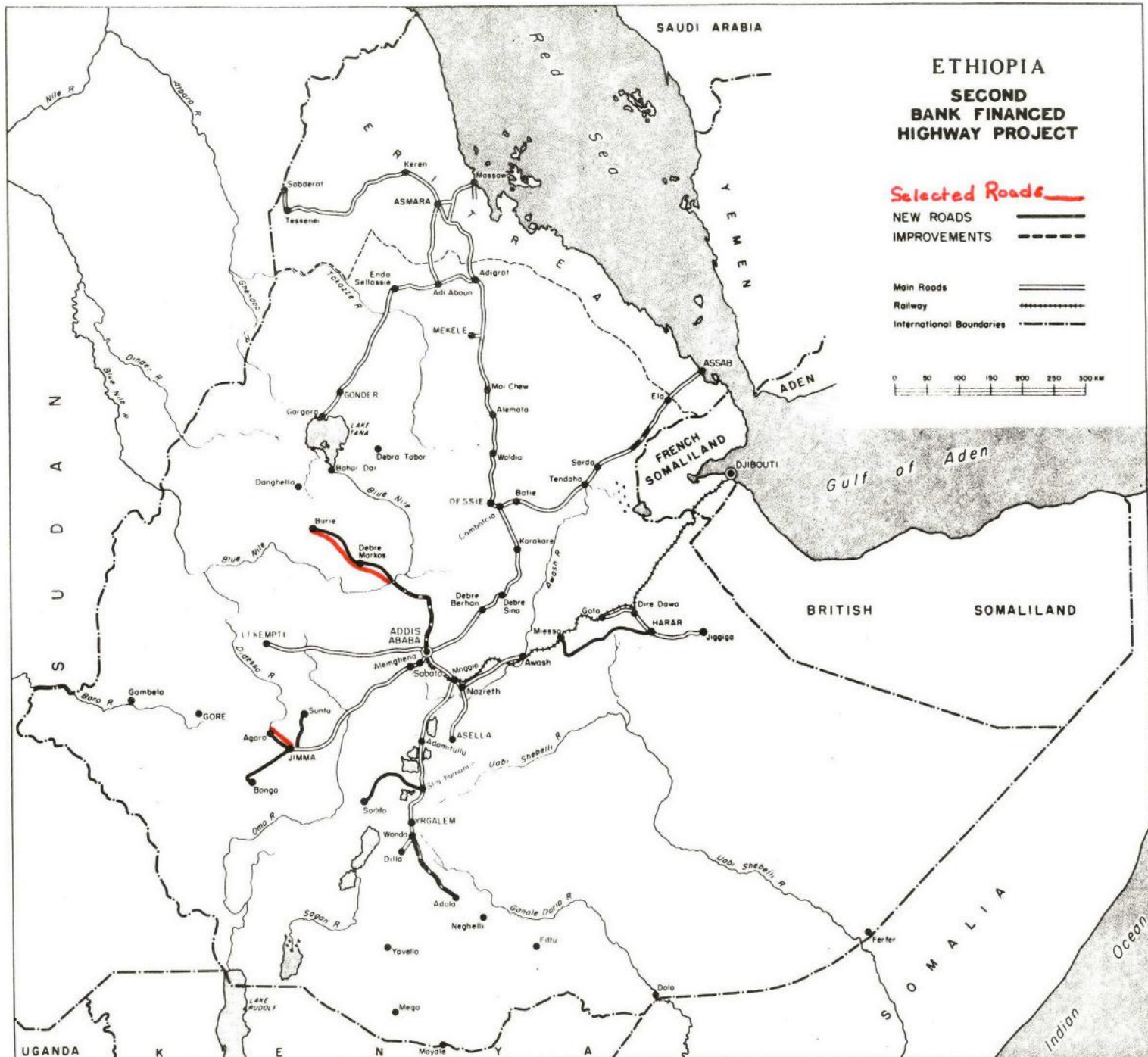
10. Competition of selected roads with railways (when applicable)

- a) Traffic diverted from rail to road
- b) Impact of traffic diversion on total transport costs.

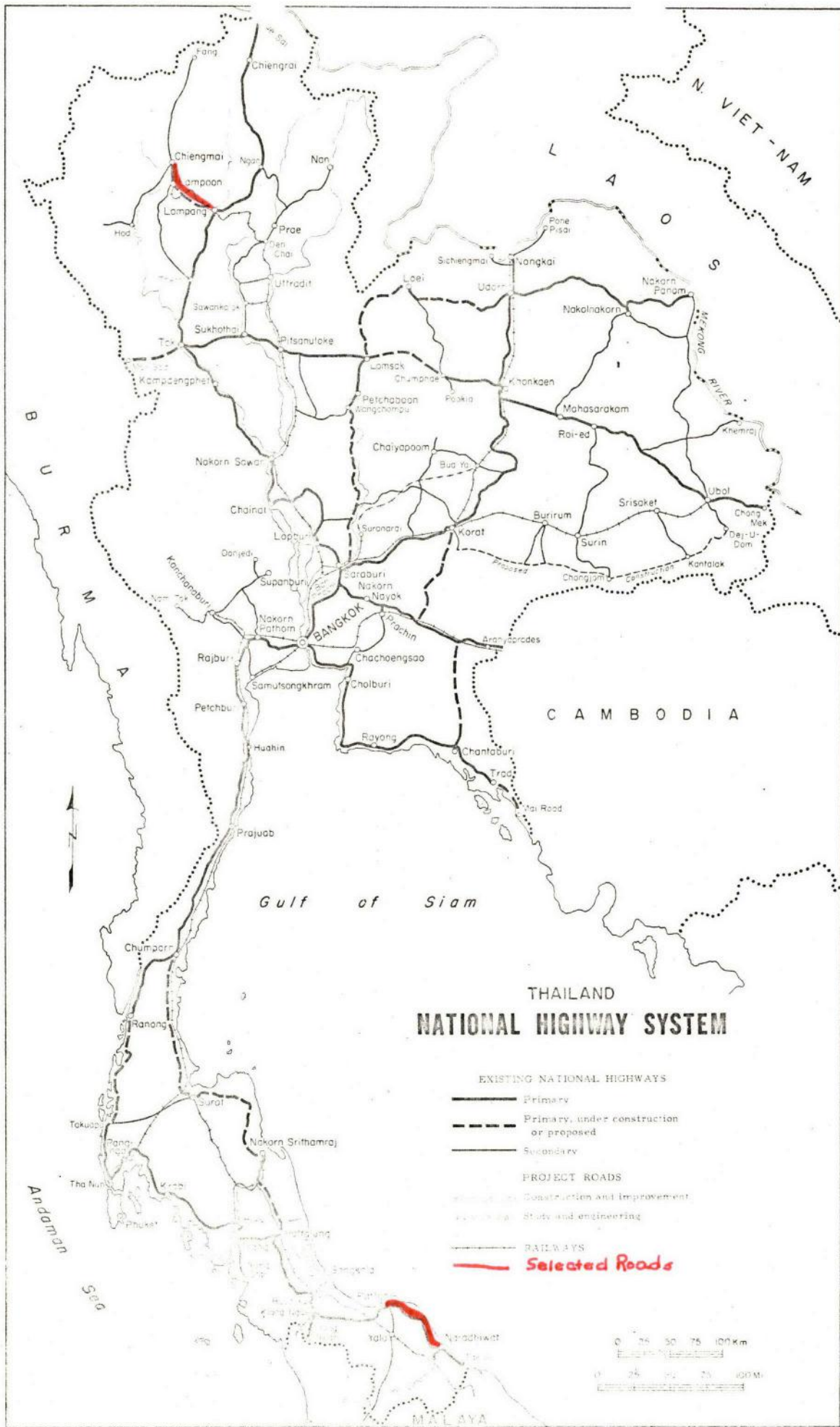
11. Impact of the project (Bank) on institutional development

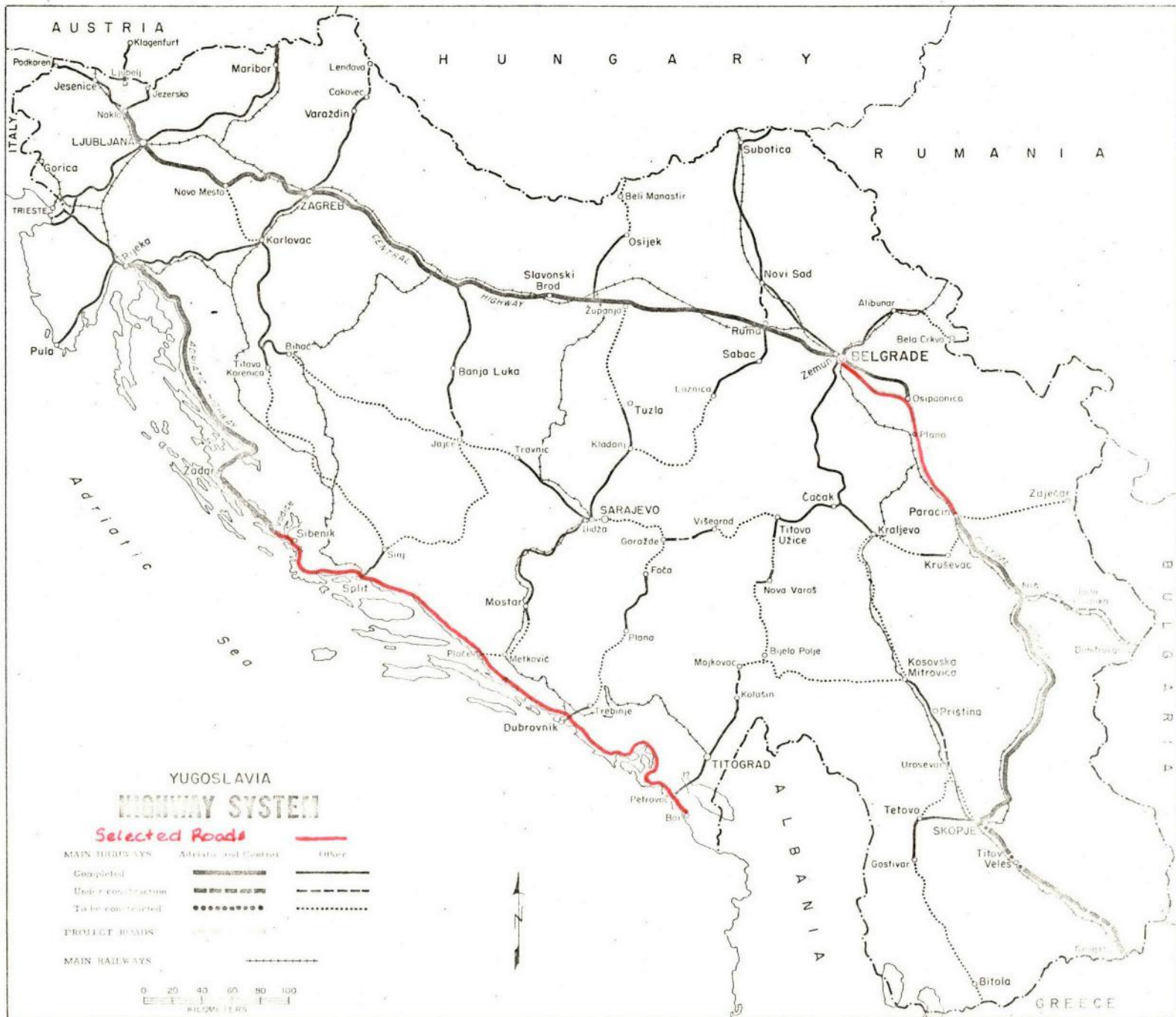
12. Impact of Loan Conditions

- a) Conditions related to institutional improvement.
measurement of their actual impact.
- b) Conditions related to road maintenance
- c) Conditions related to procurement methods.
- d) Others (See each case)









OFFICE MEMORANDUM

TO: Mr. R. S. McNamara (through Mr. J. H. Adler)

DATE: March 27, 1972

FROM: C. R. Willoughby *CRM*SUBJECT: Follow-up to Operations Evaluation Studies

At the meeting about operations evaluation work last Monday night, March 20, you asked for our views regarding follow-up to operations evaluation reports and the suggestions contained in them. I have talked to various persons on the matter and present my conclusions below.

There is a short-run aspect to the subject: how should the recently circulated Power Report be presented to the Board on April 4? There is also a long-run aspect: what actions should be taken in connection with implementation of the suggestions and how should such implementation be checked? The former I deal with in the attached briefing note for the Board Meeting and the latter in the paragraphs below.

You will have noted that the delicately phrased suggestions at the end of the report refer mainly to matters which the limited amount of experience reviewed suggests should receive added emphasis in the operational work of the Public Utilities Projects Department and in related research (Public Utilities Department's own program and that organized with the Economics Department); a few of them refer to matters for which others are mainly responsible -- e.g. joint financing suggestions (Mr. Knapp and Mr. Cope) and world trends in power financing (Economic Program Department). Perhaps members of the Board will comment on some of the suggestions at the forthcoming meeting. At some point after the meeting you may wish to call upon those responsible, and principally in this case the Public Utilities Projects Department, to write you a memo outlining what they are doing or propose to do about each suggestion, or, where they disagree with the suggestion, the reasons for such disagreement. In fact we understand that the Public Utilities Department has no disagreements of principle, though there might be disagreements on specifics or on speed or extent of action. In that connection one has to bear in mind two factors: (a) the limited sample on which our suggestions are based and the wider perspective which the Department must maintain and (b) the staff and budget constraints on the Public Utilities Department and others.

Implementation of the suggestions accepted would presumably be supervised mainly by the Office of the Director, Projects. But, if you felt it necessary, the Operations Evaluation Division could report to you a year or two later on the extent to which its suggestions had been implemented.

For the case now in hand I think that there would be considerable advantage to accepting the next Sector Program Paper on Power as including

the Public Utilities Projects Department's response to the suggestions in the evaluation report. Hence no separate memo would be required.

I consider this an informal but adequate procedure for follow-up; the Board would be kept informed by means of the Sector Program Paper and any of the suggested changes in appraisal report coverage that the Public Utilities Projects Department might decide to make.

Attachment

Briefing Note to Mr. McNamara for Introduction of the "Operations
Evaluation Report: Electric Power" to the Board on April 4, 1972

In introducing the report to the Board you may wish to refer to your Administrative Circular of September 1970 giving the Programming and Budgeting Department responsibility for evaluation of the Bank's contribution to development. A division was established and major work began early in 1971. You will recall that the Board was informed in February 1971 of the efforts we were starting: a pilot phase consisting of a major study on Colombia and a much smaller study on selected power utilities. A report to the Board on the Colombia study should be ready in June and it is probably at that time that it will be most appropriate to decide the future direction of operations evaluation work, after comments on the initial experimental phase have been received from the Executive Directors and the staff. You may also want to point out that the report presented for discussion now is more elaborate than originally intended, reviewing the Bank's overall role in power, on the basis of the sample selected, rather than a few power loans as such. At this point you might introduce Mr. Willoughby to talk specifically about the power report.

The presentation of Mr. Willoughby should not attempt to summarize the report or even its major points but should be very brief and confined to points such as: (i) the report emerges from both the work on Colombia and brief reviews of other utilities, (ii) the purpose of the report is mainly to see whether the Bank's lending operations have in fact achieved what they set out to do and what lessons can be drawn from that experience,

(iii) the report has not been cleared by other departments of the Bank, but many useful comments have been received which have been taken into account in revisions and (iv) we would greatly value the reactions of the Board to both the substance and the suggestions contained in this first product of the experimental phase of evaluation work.

After Mr. Willoughby's presentation you might wish to say something along the following lines: "Before I open the discussion I would like to touch on one question which is, I am sure, in many of your minds: where do we go from here with the recommendations that emerge from operations evaluation studies such as the suggestions contained in this report? We have not made any final decisions on this point, but presently we feel that formal implementation procedures are probably not necessary. Evaluation efforts may produce lessons either confirming the validity of past approaches and policies or indicating the need for changes. Being based on a sample, the lessons may sometimes have to be tempered with wider considerations before implementation. In this sense evaluation efforts are likely to be mainly one source of ideas, along with others, about the direction in which policies and procedures should move. Some of the lessons may require changes in operating procedures, scope of reports or emphasis in research, but these are part of the normal continuous adjustment process. Occasionally they may suggest the desirability of a significant change in policy and then of course they would be used to help in the preparation of an appropriate Policy Paper for the Board. Most generally they will provide a background of actual experience which you yourselves and the staff will wish to keep in mind in considering future loan proposals, policy issues and sector program papers.

"Thus implementation is likely mainly to be an informal matter. For this reason I have asked Mr. Weiner, whose Department is principally affected by the Power Study, to be present today so that he can answer any questions you may have on implementation aspects."

OFFICE MEMORANDUM

TO: Mr. R. S. McNamara

DATE: February 1, 1972

FROM: John H. Adler

SUBJECT: Draft Work Program for Operations Evaluation Division

1. This is the work program which you asked Willoughby to prepare. I have gone over it carefully with him and fully agree with the substance. I am sending copies of this memo to Messrs. Knapp, Aldewereld and Chenery to obtain their comments. You may want to have a meeting to discuss the proposals with them.

2. Please note that the program is still in draft form. Before it is firmed up it will be necessary to obtain the views of the other Departments, but in my opinion this should not be done until we have an indication that you want the Operations Evaluation Division to proceed broadly along the lines proposed.

3. The paper is in six parts. First, it briefly reviews where the Operations Evaluation Division stands (pp. 1-4). Second, it defines the Division's task and indicates how it relates to the work of other departments (pp. 5-10). Third, it discusses the different ways in which the Division can fulfill its responsibilities (pp. 11-18). Fourth, it reaches conclusions as the basis for design of a work program (pp. 19-21). Fifth, it presents principles to guide the formulation of a program and discusses the proposed program (pp. 22-29). Sixth, it reviews manpower requirements and some related administrative matters (pp. 30-34). There are also three annexes--I, the proposed work program FY1973-76, in detail; II, a digest of comments received to date on the Colombia report; III, a set of sample terms of reference for project audits.

4. We had some discussions last week with Mr. Aldewereld about presenting the results of the Electric Power Study to the Board. We expect to receive the comments of the Public Utilities Projects Department on the study at the end of this week. The most important question to be resolved is the form that the report to the Board should take. We would recommend that it should be a report addressed by the Operations Evaluation Division to you, which you then--with a disclaimer, if appropriate--distribute to the Board for information and, presumably, discussion. This would clarify the distinction between this document and normal reports to the Board in which you are recommending particular steps. This form of presentation would be consistent with the semi-independent view that the Operations Evaluation Division is supposed to take and the fact that its reports cannot therefore formally be cleared by the other Departments of the Bank, although they will of course be edited and adjusted to take fullest account of comments received from other Departments.

5. As regards the coverage of the report that would go to the Board on the Electric Power Study there are basically two alternatives, as far as we can see. One would be the existing Summary and Conclusions, as amended in light of comments to be received and strengthened with some tabular presentations from the text; this, we estimate, would run to about 75 single-spaced pages. The other would be a fuller report, including basically the existing general chapters (Chapters I and XIV-XIX), together with the summaries of the twelve case-study chapters, the whole being prefaced with a brief summary concentrating on the major findings; this, we believe, would amount to some 200 pages in total. In each case whatever was not sent to the Board (i.e., particularly the individual case studies) would be made available on request. Of the two alternatives, we tend to favor the second one even though it will involve more work; but our viewpoint may be affected by the comments we expect to receive from the Public Utilities Department at the end of this week.

JA

cc: Mr. Knapp
Mr. Aldewereld
Mr. Chenery
Mr. Chadenet/Mr. Baum
Mr. Henderson

JHAdler:vvw

D R A F T
CRW/lmh
January 31, 1972

TO: Mr. R. S. McNamara (through Mr. J. H. Adler)

FROM: Christopher Willoughby

SUBJECT: Draft Future Work Program in Operations Evaluation

1. In a conversation early in December 1971 you asked us to consider the possibility of greatly expanding our evaluation coverage of past Bank operations in different sectors, using the techniques of project, sector and country studies, and to prepare a program of studies for the next three or four years. You suggested that we give particular attention to the feasibility and likely value of small-scale studies auditing project performance against appraisal report projections, and you expressed special interest in the possibility of developing a system which would yield small reports to the Board on each project a standard number of years after its completion. We have given your requests careful consideration and reviewed our experience to date. After considering several alternatives and variants, we have reached the tentative conclusions and proposed program for the coming months and years which are discussed in what follows.

The Pilot Phase: Colombia and Power Reports

2. The present Operations Evaluation Division of the Programming and Budgeting Department was originally created by your Administrative Circular of September 2, 1970 as a unit within the P & B Department with responsibility for evaluating "the contribution of the Bank's operations to the development of member countries." At that time we talked about a pilot phase for the unit in which, once a staff of three had been recruited, five projects would be evaluated over a six-month period, or by about June 1971. In the event, as you know, with a staff averaging some six professionals

and somewhat fewer research assistants, we in fact evaluated some 50 projects in the year ending December 1971. Our draft report on Bank operations in Colombia, covering 33 projects in some detail, was issued November 1, 1971 and our draft report on Bank operations in the Electric Power Sector, covering 18 completed projects in various countries as well as 9 in Colombia, was issued December 22, 1971. In the Administrative Circular you emphasized the large extent to which we would have to draw on the advice and knowledge of other Departments of the Bank, and most of them have indeed contributed generously of their time, although naturally, as was to be expected with the first effort at evaluation, there has also been a good deal of misunderstanding of our role -- particularly of the fact that we were not trying to dredge up mistakes from the past in order to attribute responsibility for them nor, on the other hand, to develop propaganda material, but rather to evaluate the performance of the Bank as an institution, its policies and procedures, with a view to learning lessons for the future.

3. The report on Colombia found that the Bank's major lending -- for projects in power and highways -- had made important contributions to the development of the country. On the other hand institutional and structural problems in the country had severely hurt the effectiveness of the Bank's smaller-scale lending for railways, agriculture and the steel industry and significantly limited the efficiency of resource use more generally. The Bank had nevertheless demonstrated considerable ability to help the Colombians overcome such institutional and structural constraints in some areas, notably in some aspects of the electric power sector, in its Bogota

water supply project, by means of its annual Memoranda of Economic Understanding and, potentially, in secondary education. Over the years the Bank had developed into a singular combination of investment bank and development organization vis-a-vis Colombia, which gives it considerable scope and opportunity for helping to solve the crucial institutional and structural bottlenecks -- by assisting reform of domestic capital markets, reaching a studied view on land reform (urban and rural), seeking development impact for projects and orienting its lending to areas critically in need of institutional changes, particularly housing, small-town water-supply, production of fruit and flowers and vegetables, rural education, public health, small industry, small-town power and feeder roads, amongst others.

4. The report on Electric Power found that the Bank had played a crucial role in helping the developing countries meet their rapidly expanding power requirements over the last twenty years. In financial terms it had provided as much as about 15% of the total foreign exchange cost of public power expansion in these countries over the period. In the institutional sphere it had contributed significantly to achievement of structural improvements and increased efficiency on the part of power suppliers; out of the ten situations studied several had clearly benefitted from Bank involvement and only two were relatively unsuccessful from the institutional viewpoint, both located in very difficult political environments. In its approach on financial and institutional matters the Bank itself had shown steady improvements over the years in techniques and procedures. On the other hand the Bank had seriously neglected -- and was still neglecting --

to give adequate attention to most of the basic development issues in power, and this was an important shortcoming since there were clear signs of over-investment in several of the systems and it also meant that the Bank was unable to advise on basic dilemmas. Attention in Bank research and appraisals was needed for system reliability standards, distribution standards, potential development benefits of power, new connection policies and tariff structures.

5. These reports have been in the hands of the relevant operating departments of the Bank since their dates of issuance, and we are gradually receiving comments, many of them highly useful although, as far as we can see to date, not leading to substantial changes in the principal conclusions reached. For your information I attach in Annex II a short digest of comments received to date on the Colombia study, in which I try to highlight the main critical points made. We expect to continue to receive comments at least through the next six weeks. Provided that arrival of comments and the revisions they require do not exceed my present expectations I would hope that it might be possible to send to the Board on April 1 a document on the power study and on June 1 a document on the Colombia study -- and naturally earlier if at all possible. These documents for the Board would be only parts of the reports as they now stand, with the remaining parts being made available on request. As you know, some of our findings relate essentially to Bank policies -- but seen from a relatively narrow perspective of just one country or sector -- and, if you agree, Mr. Adler and I intend to explore with Mr. Chenery the connection that should exist between the findings of Operations Evaluation studies and the systematic

review of policies which is to take place under the new arrangements.

Evaluation work in the Bank

6. Evaluation of the activities of national or international development agencies is a relatively underdeveloped field, and the efforts we have made to date, as briefly recounted above, seem greatly to exceed those made by any other organization. The subject of evaluation is beginning to be more widely discussed.^{1/} But there is no set of commonly agreed basic principles. As you told the Board last year we can expect to take five years to reach really good procedures.

7. For the Bank there are three central purposes of evaluation studies. The first can be called "public and internal accountability," that is, the need to be informed on the results of past Bank activities. From the beginning most Bank activities have had specified objectives. The management of the Bank and other persons and institutions are entitled to know, after a reasonable period of time, whether these objectives were met, and, if not, why not. A second, more general purpose is to learn from experience in order to improve future Bank activities. Given the Bank's general orientation, this is tantamount to studying the contribution of its operations to development, as the Administrative Circular put it. The third purpose is to use past Bank activities and experience as test cases in the development of new operational techniques or in the study of policy issues. But in this case the main focus is not the evaluation as such, but the techniques or policy issues to be analyzed.

^{1/} See, for example, OECD, DAC, "Evaluating Development Assistance. Problems of Method and Organization." Paris, October 8, 1971.

8. Actually, the most important type of evaluation in the Bank hitherto has probably been self-evaluation by the Projects, DFCs and Area Departments. Here I am thinking less of supervision missions (which generally take place at a time when the benefit side of the cost-benefit ratio is only partially visible except for some items such as consultant contracts), but more of the rather informal implicit process of learning from experience that results from all sorts of missions -- economic missions and appraisals of 'repeater' projects, for instance -- as well as from many of a Loan Officer's regular activities. Establishment of the Operations Evaluation Division was intended not to replace this process but to reinforce it with a more systematic review by a unit outside the main lines of command of the Bank's operating departments. But the work of the Division cannot be considered without reference to the procedures of the operating departments, particularly in view of new initiatives underway in the Projects Departments. In the first place I understand from Mr. Chadenet that the Projects Departments will prepare, with borrowers' help, Completion Reports on all projects completing construction/disbursement after the start of FY1973. Undertaken at this stage in a project's life, such reports will be able to deal fully with actual project costs, reasons for divergences from expected costs, consultant performance, and institutional achievements to date, but only to a limited extent with project benefits. Nevertheless such reports will be of considerable utility to us insofar as they will establish actual project costs (on the discovery of which we spent an inordinate amount of time in Colombia), they will provide a clear picture of lessons drawn by the Projects Department,

and they will, for some simpler projects (eg. power), go a long way to cover some dimensions of benefits.

9. In the second place, and even more important from our point of view, the Projects Departments are moving towards greatly strengthening the trend that has already been underway, as you know, toward use of built-in evaluation systems and monitoring schemes which generate data flows, for project managers as well as for the Bank, not only about project costs but also about project benefits. Our Colombia report clearly brought out the need for more target-setting in loan appraisal and negotiations and for introduction of systems to monitor performance against such targets. This has already been started with some projects in the fields of agricultural credit, education and family planning, and some work is underway to develop comparable systems for projects in the more traditional fields -- particularly highways (to be monitored through indicators such as traffic levels, maintenance standards, trucking rates or vehicle operating costs and, in some instances, agricultural or other production in the area traversed). Introduction of such systems, with proper checks and control to ensure the veracity of the information generated, and sound arrangements for digesting it in Washington, will mean that the operating departments will know an increasing amount about specific trends connected with utilization of their projects.

10. Reference should also be made to some directly evaluative work that the operating departments have underway. Most importantly, the DFCs Department is setting up a pilot program for joint missions with the Economics

Department to evaluate the performance of selected past sub-projects of some of the companies it has assisted; not having been done before, the initial effort would involve some methodological work, but it is envisaged to expand the coverage from two companies ^{1/} in CY1972 to perhaps 3 or 4 in CY1973. Also, the Education Projects Department is undertaking a special small-scale research project in the second half of this calendar year to develop appropriate evaluation methodology. These developments are very positive and helpful.

11. More formal evaluation exercises of various types of Bank activity have been conducted by both the Economics Department, since 1965, and the Programming and Budgeting Department, through its Operations Evaluation Division, since 1971. Some uncertainty has been expressed recently as to where the dividing line in this field should fall between the two Departments. To my mind the situation is quite clear, in principle. Even formal evaluation is too difficult a job, too large and requiring too much imagination, to be left to one organizational unit. Our studies to date have strongly confirmed me in this view. For instance, it is quite apparent that the Bank should be giving much more attention to ways of measuring, fostering, planning development impact for its infrastructure projects (as opposed to meeting what has come to be called 'established demand' or trend traffic/load 'requirements') and this involves work on economic methodology, financial practices, design standards, local government and tax structures, regional planning, utility tariff structure, investment balance analysis. The operating departments need this methodology for their advice and project

^{1/} I understand from Mr. Gulhati that missions are planned as follows: to KDFC in Korea in May 1972, to TSKB in Turkey in October 1972 and perhaps to NIDB in Nigeria in early 1973.

selection and appraisal, and we need it for our evaluations; the Bank's lack of it showed up in some of our studies in the form of excessive design standards, for instance, and in others in our simple inability to say whether a particular past investment was worthwhile or not. Recently the Economics Department has had the staff to take up a few of the issues -- such as highway design standards and impact of certain types of agricultural project on employment -- and one of the techniques they have used is to analyze relevant experience on selected past Bank projects. Our studies underline the need for more of this type of work, which is clearly the sphere of the Economics Department.

12. Thus it seems to us that the responsibility of the Economics Department in connection with evaluation work is to concentrate on selected problems and policy issues and to develop means and methodologies of resolving them, with ex-post evaluations of past experience being one among various techniques that may be appropriate. The responsibility of the Operations Evaluation Division of the Programming and Budgeting Department is to evaluate the performance of the Bank and its operations quite broadly and generally. Clearly the two types of work are closely related; as indicated, we need their methodological work to help us in our analyses and perhaps we can help them, through our studies of experience, in the identification and specification of areas needing attention. Sometimes we will group projects for evaluation around particular issues of operational importance, and sometimes we will need to make the beginnings of methodological development to deal with some problem we encounter; equally they will no doubt

sometimes uncover aspects of past experience that are of wider relevance than the problem they have under study at the time. Hopefully we will be able to continue and expand the cooperation with the Economics Department which we have already enjoyed, and perhaps sometimes it will be worth planning joint studies. But the basic distinction in orientation of the two groups and their studies will no doubt remain. Hence, in what follows, I shall not refer again to the last purpose of evaluation mentioned in paragraph 7 above, considering it the responsibility of the Economics Department.

The Job of the Operations Evaluation Division

13. Considering our responsibility, then, to be evaluation of Bank performance, it is useful to classify the activities of the Bank that we should subject to evaluation in four groups: a) lending operations, b) institution building and related loan covenants and technical assistance, c) policy advice and understandings at sectoral and national levels, and d) procedures and methods (appraisal and supervision methods, resident representative offices, consultative groups, missions, use of consultants, procurement rules, etc). This last group really corresponds to a different dimension -- of techniques -- which generally needs to be evaluated in direct connection with study of each of the first three groups, although in some cases it might be useful to deal with some aspect of procedures and methods (eg. use of consultants) on its own.

14. Each of these activities can be evaluated at several different levels. These levels can best be indicated by key questions, as follows,

given in increasing order of depth of evaluation:

- a) Were the original objectives attained?
- b) If so, was this due to the project, and, if not, why not?
- c) Could the activity have been designed or handled in a better way?
- d) Was the activity worthwhile in light of sectoral and national priorities?

Obviously there are many possible sub-divisions of these questions, but these represent the principal alternative levels. In many respects these questions, as applied to projects, correspond to the different stages leading up to commitment of a loan -- the first two questions corresponding to project appraisal, the third to project preparation and the fourth to project identification and selection -- and it is sometimes useful to consider the different levels of evaluation in this way.

15. Finally by way of classification, it is useful to list the different types of evaluation studies that we can conceive:

- a) simple audit studies of individual activities
- b) audit studies of series of loans to a single institution/
sector
- c) in-depth studies of individual activities or series thereof
- d) comparative project studies
- e) sector or sub-sector studies -- i.e. all projects in one
sector or system (eg. hydrological) in a country.
- f) country studies (or regional -- national or international)

The word 'audit' is used here not in a financial sense but in the sense of simple comparison, for instance in the case of projects, between actual and expected values for construction costs and time, supply and demand for project output, operating costs, financial performance, direct benefits, etc. Comparative project studies mean reviews of projects sharing some common characteristics but located in different countries.

16. A rough indication of the relative costs, in terms of professional staff time, of these different types of studies can be given (having in mind mainly projects of the types completed in the late 1960s and not allowing for savings which should result for later projects from availability of Completion Reports and monitor data). Studies of the first two types would tend to require between two and six man-months, the amount of time depending less on the number of loans involved and more on the sector, with electric power falling at the low end, highways in the middle and industrial and agricultural credit at the high end. Since appraisal reports have tended to become more complex over time and these audits would consist basically of comparison between expectations at appraisal and actual developments there would be some tendency for the time required to be greater the more recent the project. In-depth studies of individual projects or series, envisaged here essentially as follow-ups on projects shown by simple audit to warrant further study, would take around 4 - 10 man-months. Sector or sub-sector studies would typically require some 20 - 40 man-months, as best we can see, and country studies some 50 - 80 man-months. Obviously these figures must be taken as only quite rough guides; they are also

exclusive of consultants and of the time, not insignificant, spent by the operating departments on review of drafts.

17. From the experience gained in the Colombia and Power studies of the Bank's contribution to development, that of the Economics Department in doing a few very thorough project evaluation studies in the past, and the results of the detailed review of past Bank loans which underlies the present paper, we have attempted to specify which of the activities and issues that should be evaluated could be covered in the different types of studies. Table 1 shows the potential of the various types of studies for answering, for each of the activities to be covered, the main evaluation questions given earlier. Bank procedures and methods are omitted from the activities since, as mentioned, they are generally best treated along with the other activities. Table 2 relates more specifically to lending activities and shows the potential of the various types of study for coping analytically (as opposed to purely impressionistically) with some typically important questions. The content of these tables does not pretend to be comprehensive and, because of its nature, cannot be too precise. Each relation will have several exceptions -- especially for projects in the more complex sectors, since power and highway projects have been had mainly in mind. Nevertheless the tables provide a useful base for planning.

18. The tables make no direct reference to what we have called comparative project studies because these can be based on project studies of different types, from the simplest to the most complex. The comparative Power project study which we did last year was based on a combination of

Table 1

Main Evaluation Questions Covered by Different Types of Evaluation Studies

<u>Question</u>	<u>Individ. Project Audits</u>	<u>Project Series Audits</u>	<u>In-depth Project Studies</u>	<u>Sector Studies</u>	<u>Country Studies</u>
1. Were the objectives attained?					
a) lending	**	**	**	**	**
b) institution bldg.	- /P	P	**	**	**
c) policy advice	-	-	-	**	**
2. If not, why not?					
a) lending	P	P	**	**	**
b) institution bldg.	-	P	**	**	**
c) policy advice	-	-	-	**	**
3. Could the activity have been improved?					
a) lending	P	P	**	**	**
b) institution bldg.	-	P	**	**	**
c) policy advice	-	-	-	**	**
4. Was the activity worthwhile in terms of sectoral or national priorities?					
a) lending	-	-	P	P	**
b) institution bldg.	-	-	P	P	**
c) policy advice	-	-	-	P	**

** = yes
P = partial
- = no

series audits of some projects together with rather deeper studies of the principal Colombia projects in a country context, all placed within the wider context of overall Bank role in power.

19. Several conclusions can be derived from these tables. The only question that could be answered by all types of studies is the first one (Were the objectives attained?) and that only for certain aspects of lending activities. Conversely, country studies are the only type of study capable of answering all questions and covering all activities. Individual project audits are suitable only for answering the first question with regard to the physical aspects of projects and for providing some very general indications about the reasons why some of the objectives might not have been attained and, to a slight extent, ways in which the projects might have been improved. Series audits, appropriate where the Bank has made a series of loans to an individual entity, are a little stronger on the institution-building side. In-depth studies of individual projects or of series of projects can cope quite well with most of the subjects typically arising under the first three questions but remain weak on matters involving other sectors (eg. development impact) and the wider framework (institutions); they can only deal partially with the fundamental fourth question (see Table 2). Sector and country studies are required for full coverage of the lending and institution-building activities and these types of studies are the minimum level at which sector policy advice activities can be evaluated.
20. There are a number of important considerations which are not reflected adequately in the tables. Although all types of study suggested can

Issues that are possible to study in different types of evaluation studies
(lending activities only)

	<u>Individ. Project Audits</u>	<u>Project Series Audits</u>	<u>In-depth Project Studies</u>	<u>Sector Studies</u>	<u>Country Studies</u>
1. Were the objectives attained?					
a) construction costs	P/**	P/**	**	**	**
b) production targets	**	**	**	**	**
c) operating cost levels	**	**	**	**	**
d) prices	**	**	**	**	**
e) financial return	**	**	**	**	**
f) development impact	-	-	P	P	**
g) covenants adhered to	**	**	**	**	**
2. If so, was this due to project and, if not, why not?					
a) Adequacy of engineering and planning	P	P	**	**	**
b) institutional arrangements	P	P	**	**	**
c) balance of payments situation	**	**	**	**	**
d) developments in other sectors	-	-	**	**	**
e) government policy	P	P	**	**	**
f) cash flows/inflation	**	**	**	**	**
g) acts of God	**	**	**	**	**
3. Could the activity have been improved?					
a) size of project	P	P	**	**	**
b) design standards	-	-	**	**	**
c) technical solution chosen	-	-	**	**	**
d) timing	P	P	**	**	**
e) pricing policy	-	-	**	**	**
f) institutional org.	-	P	P	**	**
4. Was the activity worthwhile?					
a) economic return (direct benefits)	-/P	-/P	**	**	**
b) development impact (indirect benefits)	-	-	P	P	**
c) priority in sectoral context	-	-	P	**	**
d) priority in a national context	-	-	-	P	**

** = yes

P = partial

- = no

in a sense answer the first question (objectives achieved?) and to some degree the second question (why or why not?), the answers become a good deal more valid as we move across the page, for three main reasons. First, a distinction has really to be drawn between proximate objectives (eg. so many vehicles per day for a road project, graduating so many students with given educational achievements for an education project, such and such volume of crop production for an agricultural project) and basic objectives (promoting efficient transport system and generating new productive activities for the road project, filling projected manpower gaps for the education projects, and promoting efficient agricultural production for the agricultural project); audits will generally be able to cover only proximate objectives. Second, it will not normally be possible in audits to make any distinction between what occurred as a result of the project and what would anyway have occurred without it; agricultural production may have doubled in an area but this may have nothing to do with the road project or the agricultural credit provided but result entirely from, for instance, adoption of a new seed variety. For these two reasons, economic benefits will remain largely an unknown with such studies. Thirdly, the important job in the 'If not, why not?' type of question is not to list the various contributing factors (usually many) but to try to say which were most important and to trace interrelationships; this, which is difficult in the most thorough studies, cannot seriously be attempted in audits.

21. The most serious of these deficiencies in the simple studies is the second one, because it means that such studies largely by-pass the key question, what difference did the project (or any other activity) make?

Formulating a sound view of what would have happened in the absence of (a) the project and (b) the Bank is the most crucial, and also one of the most difficult, problems of evaluation, not only in regard to physical aspects of projects but also, and even more, institutional development and, naturally, policy advice; a sound view on this is a sine qua non of a sound view as to how worthwhile a project or any other activity was. Eventually we were able to develop fairly solid ideas on these matters in most connections in Colombia (which, incidentally, indicated amongst other things that a number of projects which we consider retrospective mistakes could well have been considerably worse without the Bank, as pointed out in the report), but this view necessarily remained much vaguer and more generalized in the case of the non-Colombian power company audits. To put the same point another way, where structural change is as important a dimension of development as it is in Colombia (and I believe this is true of many countries) the fundamental judgment as to the actual value of a particular Bank activity or a project depends heavily on the evaluator's understanding of the flexibility (readiness to change) of the various parts of the economy and society, an understanding which cannot be expected to emerge from study of single projects.

22. There is another point about the tables. They fail to bring out the cross-fertilization of ideas among evaluations of projects and sectors in a country study which contributes so markedly to improved quality and utility of the evaluations, even in a situation as Colombia where data limitations severely restricted the inter-sectoral analysis possible. Also macroeconomic aspects of foreign lending (eg. our small study of the

savings problem) can obviously only be dealt with in country context.

Bases for Work Program

23. Referring back then to our basic responsibilities of evaluating the performance of the Bank's operations and activities to fulfill the functions of public and internal accountability and of learning from experience, we would draw the following conclusions:

(i) The Division's studies should fulfil both purposes, as you have always emphasized. With the Bank's increasing responsibilities, concerned Governments want to see the most being learned from experience to make resources go further and effectiveness thereby verified.

(ii) To fulfil either function satisfactorily, as we agreed last Spring, the orientation of the Division must be to be as critical, in a responsible and constructive manner, as it has the imagination and sound judgment to be.

(iii) We understand that public and internal accountability for Bank/IDA lending is considered to require that all or most lending operations should be systematically reviewed in some way or another by a unit outside the regular operating departments, at a time when project benefits, in a simple sense, are fairly visible. Sampling is not adequate because it may too easily be considered biased.

(iv) Internal learning would generally recommend concentration of deeper attention on selected activities from which lessons could thereby be derived.

(v) Under both accountability and learning criteria it is generally

more important to review more recent projects than older projects, and it is also often cheaper because of the difficulties of gathering data on old projects. Equally projects in Part II countries are the universe to consider for evaluation, mainly because these countries account for virtually all new Bank/IDA lending.

(vi) Projects Department Completion Reports and project monitoring systems will help substantially to ease the work-load on the Division but neither is directly relevant now because they are only just coming into operation. They will be crucial later.

(vii) Where the Bank has made a series of loans to a single institution it is normally much more economic in manpower and often unavoidable to evaluate the series rather than any individual loan.

(viii) Generally there is considerable advantage in concentrating deeper project studies within one or more country or sector studies because this enables the economic and institution-building objectives of the project to be dealt with much more fruitfully and it permits coverage of project selection and of policy aspects that is otherwise barely possible.

(ix) Audits of projects and series of projects, comparing proximate project objectives stated in appraisal reports with actual developments and commenting on deviations, are feasible and can, we believe, be accomplished in some 2 - 4 man-months

for most of the relevant types of projects. They can be organized in such a way as to cover systematically all projects completed a few years ago and so as to result in small standard reports to the Board.

(x) Such audit reports will partially meet a simple accountability objective but they will not contribute much directly to the underlying purposes of the Division. The increasingly sophisticated outside critics of foreign aid will not be impressed with them and might even react negatively (eg. "Is that all you are learning?"). Mr. Chadenet, as well as the Projects Department Directors with whom we have discussed the matter, have made it clear that they would not expect to learn anything from them. However the comprehensive coverage obtained could help to indicate which projects or problems should be selected for deeper study to meet accountability criteria more fully as well as learning purposes.

(xi) The work program of the Division should include several types of studies, from simple audits to sector and country studies, in a carefully integrated combination.

Work Program FYs 1973-76

24. In order to develop this work program we have reviewed the appraisal reports available, and in some cases other documents as well, for all 353 loans and credits to Part II member countries ^{1/} which have not yet been evaluated and which were fully disbursed by the end of FY1971. The basic

1/ Excluding New Zealand and Iceland.

principle we have developed is that we should undertake to provide a report to the Board on a loan/credit five years after it has completed disbursement (normally roughly equivalent to 'project completion'); and in providing such a report we would also take the opportunity to cover any previous loans to the same entity/sector in the country and, where appropriate (eg. power and probably DFCs), experience to date under any subsequent loans to the same entity/sector. The coverage of each project would vary from case to case, ranging from simple audit reports to portions of country studies, depending on various factors: the inherent complexity of the project, the amount of past Bank/IDA lending to the sector and to the country, the amount of lending for similar purposes in other parts of the world, etc.

25. Thus the program developed for the four years FY1973-76, presented in detail in Annex I, is a tightly integrated one in that all forms of study proposed are used to cover, first, projects completing disbursement in the period FY1968-71,^{1/} and, second, earlier projects; and no project appears more than once in the four-year program. Bangladesh and Pakistan have been treated separately throughout, and provision made for separate studies, in each, of all main joint loans/credits for projects. The principal criteria for selecting major Country and Sector Studies have been importance of the country in past Bank/IDA lending, inherent complexity and interdependence of the projects (eg. different works in the same river basin) and, to some

^{1/} All loans/credits completing disbursement in FYs 1968-71 are in fact covered by the program except for the Pakistan program loans (because no provision is made for a Pakistan or Bangladesh country study), the Burma Railways and Portugal power projects (because they are not current borrowers and Burma might be somewhat inaccessible) and the Afghanistan Education project (which was almost entirely cancelled).

degree, broad coverage of different continents. In the later years some provision has been made for country studies of two small countries -- these selected not on the basis that they have been large recipients of Bank loans (which would require more time to study) but on the basis that one or two or three loans previously made would anyway come up for evaluation in that year, following the principle established, and that these loans, while small in the context of the Bank's lending as a whole, often have wide impact in the country concerned and could more fruitfully be dealt with together in a minor-scale country study than individually -- without too great extra cost. You will notice that the program also includes a small provision for In-depth Project Studies, unspecified, to enable thorough studies of the few individual projects which might be thrown up by the audit reports as requiring deeper review. In addition provision is made for some Comparative Project Reviews to cover projects that are best grouped around some issue of past Bank lending performance.

26. I should emphasize that the detailed list of projects covers only loans/credits fully disbursed through FY1971 (i.e. 5 years before FY1976); in practice, as pointed out earlier and as found in the Colombia study, it will be possible and in fact often necessary, to cover to some extent subsequent projects not yet quite fully disbursed, so that the actual number of projects evaluated or audited will be rather greater than implied. The last two lines of the summary table which appears at the outset of Annex I show the number of projects listed in the subsequent pages and also make an estimate of the total number of projects likely to be covered in each

year of the program period. You will notice that the total number of projects shown for the first year is slightly less than the number which we covered last year. This results from various factors: most importantly, that provision is made in the future program for accomplishing virtually all the work in the fiscal year whereas it now looks as though completion of our work on projects reviewed last calendar year will take several months of this year, as noted earlier. Other considerations are that the staff worked excessively hard last year, that Colombia had an exceptionally large number of projects in each of the main sectors and that many of the series we chose last year happen to be longer than those that come up in FY1973 under the principle governing the program. The number of projects which would be covered increases substantially in FY1974, partly because of inclusion of the Damodar Valley, in India in that year.^{1/}

27. The effect of orienting our program mainly by loans disbursed five years before the fiscal year in which they would come up for evaluation is to meet the accountability requirement not only with complete coverage of virtually all loans signed since about 1962/63 (and therefore completing disbursement in FY1968 or after) but also with coverage of a very sizeable sample of past lending in each area of the world and in each sector/subsector. This is illustrated by Table 3, which refers to the number of loans/credits already fully disbursed in each category (excluding those already evaluated) and the sample of these loans included

^{1/} The total number of projects shown, for all years together, exceeds the number cited in Table 3 below, mainly because of allowance in the program for separate treatment of Bangladesh and Pakistan.

in the program. (Details are given in Appendix Tables I - III). Table 3 shows that two-thirds of all past loans/credits not yet evaluated would have been covered by the end of FY1976; in terms of amounts the figure is about three-quarters. Coverage would be particularly high in the case of DFC and livestock loans partly because they happen to have been made mainly in the period directly caught by the evaluation but mainly because they tend to be series loans. Coverage would be comparatively low, although still about 50%, in the case of the small Central American countries and of Ports, mainly because much of the lending occurred earlier and, in several cases, was notably discontinuous so that it gets caught less than proportionately in our system. Both categories would tend to be caught up with in later years, as more country studies could be accomplished. There will of course always remain a certain residual of early loans, mainly of a general or sectoral credit nature, which are virtually unevaluable and would be most unlikely to repay attention. Pakistan (W) and the Bank's role in the Indus Basin would probably come up for assessment in FY1977, the first year after our specified program.

28. The program will obviously need revision and up-dating as time passes. We have made only slight adjustment for political factors in the program for the first year, and none in later years, but these might prevent our taking the various projects and countries in the years indicated, so that switches would have to be made. More importantly, experience may indicate that we should depart from the five-year principle for certain types of projects. In fact this principle, while it has guided the formula-

Table 3

Loans/Credits in the Proposed Audit/Evaluation Program ^{a/}
 FY1973-76 and Total Number of Loans/Credits Fully Disbursed
 Through FY1971

	Number of Projects in Program	Total Number Loans/ Credits ^{b/} Fully dis- bursed thru 6/30/71	Program as % of Total
Eastern Africa	25	40	62.5
Western Africa	11	13	84.6
E. Asia & Pacific	29	35	82.9
South Asia	78	98	79.6
EMENA	28	45	62.2
C. Amer. & Carib.	28	61	45.9
South America	38	61	62.3
Agriculture (Total)	32	53	60.4
Credit	8	12	66.7
Irrigation	13	19	68.4
Livestock	4	4	100.0
Others	7	18	38.9
DFC	31	31	100.0
Education	2	3	66.7
Industry ^{c/}	23	30	76.7
Power	54	87	62.1
Telecomm	8	9	88.9
Transportation (Total)	80	125	64.0
Highways	36	52	69.2
Ports	13	26	50.0
Railways	28	41	68.3
Others	3	6	50.0
Water Supply	6	7	85.7
Others ^{d/}	1	8	12.5
TOTAL ^{e/}	237	353	67.1

^{a/} Excluding Loans/Credits already evaluated, as listed in Appendix Table II.

^{b/} Cases in which both an IBRD loan and an IDA credit were made for the same project are treated as single operation in these tables.

^{c/} Including India and Pakistan program loans.

^{d/} i.e. General Development and heavily Multi-purpose Projects.

^{e/} Since virtually all loans completing disbursements in 1968-71 (some 180) are automatically included in program the difference between 237 and 353 is mainly accounted for by older loans not caught by series and country studies until after 1976.

tion of the program, has had to be applied flexibly with a view to grouping projects into appropriate country/sector combinations, allowing for political constraints in FY1973, staff build-up and staff composition, etc. Also, as noted, more recent projects will anyway be covered in some sectors. But experience may show that five years, which was initially adopted mainly as an appropriate lapse of time to allow benefits of most infrastructure (especially transportation) projects to develop, may be too long for power and too short for projects such as those in education or agriculture. In the interests of the accountability criterion I think it would nevertheless be wise to keep to the objective of covering all projects completed in FY1968 or later.

29. I think we have sufficient experience now to suppose that the staff-inputs and time allowed for the different types of studies are reasonably realistic. What we have least experience of is simple audits of projects outside the electric power field. However we have reviewed in detail the appraisal reports for almost all the projects which would come up for individual project audit or series audit in FY1973 and some of those for FY1974, and we have prepared detailed terms of reference for the audits required, in order to identify as specifically as possible the maximum we could get out of such an audit and how much time would be needed. (I attach, in Annex III, a few of the terms of reference as examples). The most difficult types of project for audit are likely to be DFCs and agricultural credit, and our effort in these particular areas in FYs 1973 and 1974 will be rather experimental, although we had some experience with both in Colombia.

Program for FY1973

30. The first part of the program for FY1973 contains audits of a number of individual projects or series of projects, for which loan disbursements terminated in FY1968. Most of these projects are infrastructural and should be fairly straightforward. BNDE in Morocco, for which it will clearly be necessary to consider subsequent loans as well, I plan to cover with a relatively simple experimental approach focussing on the financial evolution of the company, institutional development (appraisal and supervision techniques and promotional work), and performance under the Statement of Policies -- i.e. the aspects which preoccupied the appraisal reports. As an alternative experimental approach to handling a DFC, I would plan to adopt the same procedure for TSKB in Turkey (also in the FY1973 program), but then to follow this up with participation of the member of our staff responsible in the mission planned by the DFCs/Economics Department in October 1972 to evaluate sub-projects (see paragraph 10 above). The DFCs Department seems agreeable to this idea; it should enable the mission to cover more ground; and it would enable us to learn with them about ex-post evaluation of sub-projects, which will obviously be important for our later work. Our report on TSKB should therefore cover selected projects as well as TSKB as an institution.

31. Beyond these project audits the main items in the FY1973 program are a sector study to cover lending connected with the Gezira scheme and a country study in Ethiopia. We have discussed the latter before, and Ethiopia is much the strongest claimant for review in Africa insofar as it has far more

Bank-supported projects completed than any other country there. A major disadvantage of Ethiopia is that it has no completed Bank-supported projects in agriculture, and it is partly for that reason that we have considered a review of the parts of the Gezira scheme in which the Bank has been involved; lending for that has been of dominant importance among Bank/IDA disbursements for agricultural schemes in Africa.

32. If our relations with Sudan were to be such that this study would not be possible in FY1973 then I would plan to switch it with the study, now planned for FY1975, of industrial and mining projects in various parts of the world, in which Mr. Fuchs has expressed special interest because of the comparative data it would generate on the matter of distribution of benefits between host-country and foreign corporation.

33. As for the immediate future -- prior to the start of FY1973 -- we shall have considerable amount of work to do, as noted earlier, to complete our Power and Colombia reports for Board presentation, but I also hope that some of our staff can be made free to begin work early on the FY1973 quota of project audits, to develop procedures for dealing with the difficult audits referred to above, to prepare for the Ethiopia and Sudan studies and, if any spare time is available, to undertake audits of one or two projects which do not get caught in our present program because of the date they were completed, but would still probably be worth brief review.

Manpower and Staffing

34. Requirements of professional staff and consultants to execute the proposed program are shown at the foot of the first page of the Annex

summarizing the program. The staff requirements exclude supervisory staff (initially myself only but shortly a second man). Naturally the requirements indicate a sharp increase now that we are ending the pilot phase and moving into more regular operation, and much smaller proportionate increases in the later years. I would hope that it might be possible to level off the staff at around 30 professionals, but this will depend heavily on progress by the Projects Departments with the project monitoring system. We have been able to apply the previously discussed five-year principle for the proposed program only because the number of loans completing disbursement in recent years has been quite small compared with new approvals: an average of about 45 in each of the last four fiscal years. Rough projections on the basis of past experience indicate that the number of loans/credits fully disbursed this fiscal year may reach 50 - 60 and that the number should rise over 100 by 1975 and 150 by 1980. Numbers of these orders would be very difficult for any Operations Evaluation Division to cope with on present procedures without an inordinately large staff. The monitoring system should mean however that brief audit reports could be prepared entirely in Washington, on the basis of monitor charts and tables, for all projects adhering reasonably close to targets; field studies would only be required for those projects showing important or unexplained departures from targets, and preparation of such studies would be aided by availability of Completion Reports.

35. With regard to consultants the estimates given in Annex I are based on what would be required to accomplish the various studies proposed

and also on reasonable ratios to staff. Because of the nature of the work -- sudden bursts of activity in quite specialized fields and on particular countries -- we will have to rely quite heavily on consultants, but experience last calendar year when we had a ratio of consultants (including borrowed staff from other parts of Bank) to staff of about 1:1 suggests that that was rather too high overall. (Allowance for sub-studies fully contracted out, as with the university institutes in Colombia, is included neither in the manpower projections nor in this ratio; we would plan to continue such studies and provision for them would be supplemental to the figures given in the table).

36. As you know, the professional staff that we have had to date, apart from Mr. Israel, has consisted entirely of new graduates from the Young Professional program. They have done a remarkable job. They have also gained experience. But we do need supplementing with technical expertise. Several of the Projects Departments have commented -- for instance Mr. Fuchs with regard to the Paz del Rio Steel Mill and Mr. Ballantine with regard to the Colombian education project -- that our studies would have been more useful had we had more technical expertise available, and of course they are perfectly right. So I would plan that at least several of the additions to the staff should be men with technical expertise in fields we are likely to be frequently involved in.

37. But there is another aspect to the expertise we need too. My original proposition in September 1970 had been that the staff of three then envisaged should be men with experience in the Projects Departments, having

therefore both the requisite technical knowledge and also acquaintance with Bank procedures and approaches. It was eventually agreed not to do this on the grounds that a semi-independent evaluation could not be done by former employees of the departments whose performance was being evaluated. It was for this reason, given the time constraints, that we had to rely so heavily on Young Professional graduates. They have brought brilliance to their work, but they would be the first to admit that one of the many ways in which our efforts to date have been deficient is in lack of full awareness of the typical operational problems and concerns of the staff in the operating departments. We did our best to repair this by having as much contact as we could with operating department personnel who had been concerned with the projects under study. But this was not adequate, and hence we did not do as good a job as would have been desirable on the fourth dimension of activities to be evaluated -- Bank procedures and methods. We hope that in the future it will be possible for arrangements to be made periodically for one or two Projects Department personnel to work full time with the Operations Evaluation Division for a very short period -- like two weeks or one month -- as advisers or consultants on some particular problem. I suspect that this could be interesting for them, it could help significantly to acquaint our staff more fully with evolving Bank operational concerns and difficulties as well as to strengthen our work on particular technical aspects, and it would represent only a very tiny amount of Projects Department staff time, since we are thinking of only, say, three or four men a year, at maximum, for a month apiece.

38. There is one other point about the organization of our work, especially of our principal studies -- namely the need for cooperation with other agencies concerned with provision of external assistance. A number of commentators on our Colombia report have expressed surprise that we do not refer much to the activities of such agencies which have been involved there. The principal reason is of course that we had no authority to review their activities and though we went to some pains to familiarize ourselves in general with what they had done and the problems they had encountered, and in the course of that we developed some opinions and impressions, we rather studiously avoided conveying such mere impressions in our report. We presented the essential facts and figures and largely left it at that explicitly. What other agencies were doing naturally had some effect on our suggestions about what the Bank should do to increase its contribution to Colombian development. But these suggestions were based primarily on converging views from the various parts of our study about the weaker areas visible in the overall pattern of development in Colombia so that, whatever others might have done, there was clearly need for their efforts to be supplemented. Given our range of authority, these strategies were about the best we could adopt. Nonetheless it would no doubt have increased the value of our study had we been able to deal more deeply with the activities of other agencies; if we are to do that in future cases we will need their active cooperation. One or two agencies have expressed an interest in cooperating with us, and now that we have had a little experience perhaps their interest will be greater. For instance it might be

possible to work the proposed study in Ethiopia jointly with the Swedes (SIDA), thereby getting the benefit of their perspective and enabling a joint review to cover, besides Bank projects, those in which they have been involved.

Recommendations

39. We should like your approval of the following:
- (i) The broad lines of the program and manpower plan proposed for FYs 1973-76 and more specifically the program for FY1973.
 - (ii) Preliminary discussions with one or two other agencies concerned with development about the possibility of organizing on a joint basis some of the studies in our work program, so that we could come back to you if and when we have worked out a specific proposal.

Manpower Plan FY1973-76

(in professional man-months)

	Unit Cost (man- months)	FY1973		FY1974		FY1975		FY1976	
		No ^a	Amount	No ^a	Amount	No ^a	Amount	No ^a	Amount
Project Audits	2.5	10	25	12	30	8	20	11	28
Series Audits: Simple ^{b/}	3	5	15	6	18	4	12	8	24
Complex ^{c/}	6	1	6	2	12	5	30	3	18
In-depth Project Studies ^{d/}	6	-	-	2	12	3	18	4	24
<u>Comparative Project Review</u>									
Industrial Projects	20	-	-	-	-	1	20	-	-
Power Procurement	20	-	-	-	-	1	20	-	-
Transport Ind. Structure	20	-	-	-	-	-	-	1	20
Another unspecified	20	-	-	-	-	-	-	1	20
<u>Sector Study</u>									
Sudan Water Resources ^{e/}	16	1	16	-	-	-	-	-	-
Thailand Water Resources	20	-	-	1	20	-	-	-	-
India Transport	40	-	-	-	20	-	20	-	-
Bangladesh Water Resources	40	-	-	-	-	-	30	-	10
Seyhan Water Dev.	20	-	-	-	-	-	-	1	20
Pakistan (W) Transport	20	-	-	-	-	-	-	1	20
<u>Small Country Study</u>									
Paraguay	-	-	-	-	5	-	20	-	5
Swaziland	-	-	-	-	-	-	5	-	15
<u>Country Study</u>									
Ethiopia	-	-	50	-	10	-	-	-	-
India-Damodar	-	-	10	-	70	-	10	-	-
Peru	-	-	-	-	10	-	70	-	10
East Africa	-	-	-	-	-	-	15	-	80
STAFF TOTAL			<u>122</u>		<u>207</u>		<u>290</u>		<u>294</u>
Staff Man-Years Equivalent (Staff at FY-end)			<u>12</u> (16)		<u>21</u> (25)		<u>29</u> (30)		<u>30</u> (30)
Consultants (man-months)			<u>66</u>		<u>100</u>		<u>150</u>		<u>150</u>
No. of Projects Covered in FY:									
- disbursed thru FY71			36		78		70		65
- approx. total			45		80		85		85

a/ i.e. Number of studies, not projects.

b/ i.e. Series of projects for which an audit against appraisal report expectations is relatively straightforward, e.g. power.

c/ i.e. Series of projects for which an audit against appraisal report expectations is likely to be difficult, e.g. DFCs.

d/ Provision for deeper review of projects which simple project or series audit shows to warrant further attention (e.g. Ghana Volta River Project, as recommended in our recent Power Study).

e/ Tentative; see text.

FY1973 WORK PROGRAM

Individual Projects

Costa Rica	Highways I of 1962	\$11.0
Trinidad & Tobago	Power I of 1962	\$23.5
Venezuela	Expressway I of 1962	\$45.0
Nigeria	Apapa Wharf of 1963	\$13.5
Morocco	BNDE I of 1963	\$15.0
Malta	Power & Desalinization of 1964	\$ 7.5
Yugoslavia	Railway I of 1964	\$35.0
Tunisia	Port I (La Goulette) of 1964	\$ 7.0
Sierra Leone	Power I (SLEC) of 1965	\$ 3.8
Thailand	IFCT of 1964	\$ 2.5 ^{a/}

Project Series

Honduras	Highways III of 1961	\$ 9.0
	Highways II of 1958	\$ 5.5
	Highways I of 1956	\$ 4.2
Costa Rica	Power II)	\$22.0
	Telecom I) of 1964	
Pakistan	Power I of 1961	\$ 8.8
	Pipeline II (SNGPL) of 1964	\$15.0
Ceylon	Pipeline I (SGTC) of 1954	\$14.0
	Power II of 1959	\$ 7.4
Turkey	Power III of 1961	\$15.0
	Power I of 1955	\$19.1
	TSKB V of 1965	\$10.0
	TSKB IV of 1965	\$ 5.0
	TSKB III of 1963	\$ 5.0
	TSKB II of 1954	\$ 9.0
	TSBK I of 1951	\$ 9.0
	TSKB VI of 1967 ^{c/}	\$25.0

Sector Study - Agriculture and Water Resources in Sudan

Agriculture	Managil Irrigation of 1960	\$15.5
Transport	River Ports and Railways of 1959	\$39.0

NOTE: Amounts shown are original loan commitments, in millions of dollars.

Country Study - Ethiopia

Communications	Telecom III (IBTE) of 1966 ^{b/}	\$ 4.8
	Telecom II (IBTE) of 1962	\$ 2.9
	Telecom I of 1951	\$ 1.5
DFCs	DBE I of 1951	\$ 2.0
	DBE II of 1962	\$ 2.0
Power	Power (EELPA) of 1964 ^{d/}	\$23.5
Transport	Highways I of 1951	\$ 5.0
	Highways II of 1957	\$15.0

a/ About 60% of this loan was cancelled.

b/ Disbursements completed in FY1970.

c/ Disbursements completed in FY1971.

d/ Disbursements completed in FY1972.

FY1974 WORK PROGRAM

Individual Projects

Botswana	Highways I of 1965	\$ 3.6
Argentina	Highways I of 1961	\$48.5
Panama	Power I (Rural Electrification) of 1963	\$ 4.0
Philippines	PDCP I of 1963	\$15.0
El Salvador	Telecom (Antel) I of 1964	\$ 9.5
Spain	Railways (RENFE) I of 1965	\$65.0
Spain	Highways I of 1964	\$33.0
Gabon	Highways I of 1965	\$12.0
Singapore	Water Supply I of 1965	\$ 6.8
Israel	IDBI I of 1966	\$20.0
Mexico	Livestock I of 1966	\$25.0
Philippines	Agricultural Credit I of 1966	\$ 5.0

Project Series

Philippines	Power II (NPC) of 1962	\$34.0
	Power III (NPC) of 1963	\$ 3.7
	Power I (NPC) of 1958	\$21.0
Yugoslavia	Power II of 1963	\$30.0
	Power I of 1961	\$30.0
Chile	Power (ENDESA) III of 1960	\$32.5
	Power (ENDESA) IV of 1965	\$ 4.4
	Power (ENDESA) II of 1957	\$15.0
	Power (ENDESA) I of 1948	\$13.5
Nigeria	Power I (ECN) of 1964 (T & D)	\$30.0
	Power II (Niger Dams Authority) of 1965	\$82.0
Chile	Lota-Schwager Coal I of 1958	\$12.2
	Lota-Schwager Coal II of 1958	\$ 9.6
Jordan	Water Supply I (Amman) of 1962	\$ 2.0
	Water Supply II (Other cities) of 1964	\$ 3.5
Pakistan (W)	Industrial Estates (Sialkot & Gujranwala) of 1963	\$ 6.5
	Share of PICIC IV of 1963	\$20.0 ^{e/}
	Share of PICIC III of 1961	\$15.0 ^{e/}
	Share of PICIC II of 1960	\$10.0 ^{e/}
	Share of PICIC I of 1958	\$ 4.2 ^{e/}
	Share of PICIC V of 1964 ^{d/}	\$30.0 ^{f/}
	Share of PICIC VI of 1966 ^{a/}	\$30.0 ^{f/}
India	ICICI V of 1963	\$30.0
	ICICI IV of 1962	\$20.0
	ICICI III of 1961	\$20.0
	ICICI II of 1960	\$10.0
	ICICI I of 1955	\$10.0

Sector Study - Water Resources in Thailand

Irrigation	Chao Phya II of 1964	\$ 5.6
	Chao Phya of 1951	\$18.0
	Petchburi of 1963	\$ 3.4
	Meklong I of 1965 ^{a/}	\$22.0
Power	Yanhee II (Transmission) of 1963	\$ 6.6
	Yanhee I (Multipurpose) of 1958	\$66.0
	Yanhee III of 1965 ^{b/}	\$ 6.0
	Yanhee IV of 1967 ^{a/}	\$ 5.0

Sector Study - Transport in India

India	Highways I of 1961	\$60.0
	Railways IX of 1966	\$68.0
	Railways VIII of 1965	\$62.0
	Railways VI of 1962	\$50.0
	Railways VII of 1963	\$67.5
	Railways V of 1961	\$70.0
	Railways IV of 1960	\$50.0
	Railways III of 1959	\$85.0
	Railways II a, b, c, d. of 1958-9	\$90.0
Railways I of 1950	\$34.0	

Country/Regional Study - Damodar Valley in India

Irrigation	Sone Project ^{c/} of 1962	\$15.0
	Power & Irrigation of 1953	\$19.5
Communications	Relevant part of Telecom II of 1965	\$33.0
	Relevant part of Telecom I of 1963	\$42.0
Industry	Iron/Steel - IISCO IV of 1967 ^{a/}	\$30.0
	- IISCO II of 1957	\$20.0
	- IISCO I of 1953	\$31.5
	- TISCO II of 1958	\$32.5
	- TISCO I of 1956	\$75.0
Power	Coal Mining of 1962	\$35.0
	Durgapur of 1962 ^{d/}	\$18.5
	Bokaro/Durgapur of 1959	\$25.0
Transport	Bokaro of 1950	\$18.5
	Relevant part of Transmission of 1965 ^{a/}	\$70.0
	Port of Calcutta II of 1962	\$21.0
Program	Port of Calcutta I of 1958	\$29.0
	Share of Industrial Imports V of 1969	\$125.0
	Share of Industrial Imports IV of 1967	\$65.0
	Share of Industrial Imports III of 1967	\$150.0

Share of Industrial Imports II of 1966	\$100.0
Share of Industrial Imports I of 1964	\$90.0

-
- a/ Disbursements completed in FY1971.
 - b/ Disbursements completed in FY1969.
 - c/ Already partially reviewed by Economics Department (Mr. Duane).
 - d/ Disbursements completed in FY1970.
 - e/ Out of the \$49.2 million total of these four loans, approximately \$35.8 million went to West Pakistan.
 - f/ Out of the \$30.0 million total of each of these two loans approximately \$21.9 million in each case went to West Pakistan.

FY1975 WORK PROGRAM

Individual Projects

Chile	Highways I of 1961	\$25.0
Niger	Highways I of 1964	\$ 1.5
Lesotho	Highways I of 1966	\$ 4.1
Liberia	Highways I of 1964	\$ 3.3
Malaysia	MIDF of 1964	\$ 8.0
Chile	Vocational Education I of 1966	\$ 2.8
Morocco	Agricultural Credit I of 1966	\$10.0
India	Salandi Irrigation (Gujarat) of 1962	\$ 8.0

Project Series

Iran	Highways II of 1964	\$18.5
	Highways I ^a /of 1959	\$72.0
Bangladesh	Eastern Railway of 1964	\$10.0
	Share of Railways V of 1963	\$ 4.8 ^b /
	Share of Railways IV of 1963	\$18.3 ^b /
	Share of Railways III of 1960	\$12.5 ^b /
	Share of Railways II of 1958	\$31.0 ^b /
	Share of Railways I of 1952	\$31.0 ^b /
El Salvador	Highways III of 1963	\$ 8.0
	Highways II of 1959	\$ 5.0
	Highways I of 1955	\$11.1
Venezuela	Power I (Guri) of 1964	\$85.0
	Power II (CADAFE) of 1965	\$14.0
Bangladesh	Share of PICIC V of 1964	\$30.0 ^d /
	Share of PICIC IV of 1963	\$20.0 ^c /
	Share of PICIC III of 1961	\$15.0 ^c /
	Share of PICIC II of 1960	\$10.0 ^c /
	Share of PICIC I of 1958	\$ 4.2 ^c /
	Share of PICIC VI of 1966	\$30.0 ^d /
China	CDC II of 1965	\$15.0
	CDC I of 1962	\$ 5.0
	CDC III of 1968 ^e /	\$15.0
	Fishing Vessels II of 1967	\$14.4
	Fishing Vessels I of 1964	\$ 7.8
	Ports (Dredging) of 1962	\$ 2.2
	Water Supply of 1962	\$ 4.4
	Irrigation (Groundwater) of 1962	\$ 3.7

Comparative Project Review

Major Industrial/Mining Projects of the 1960s:	
Algeria Gas Liquefaction (CAMEL) of 1964	\$20.5
Brazil Alcominas Aluminum of 1968 ^e /	\$22.0

Congo (B) Potash of 1967	\$30.0
Gabon Comilog Manganese of 1959	\$35.0
Israel Potash of 1962	\$25.0
Mauritania Miferma Iron-ore of 1960	\$66.0

Comparative Project Review

Experience regarding local procurement of power equipment out of Bank loans proceeds, mainly on basis of power lending in Mexico, Brazil, Argentina and Colombia (study recommended in recent Power Sector Evaluation Report Draft).

Sector Study - Water and Agriculture in Bangladesh

Irrigation	Brahmaputra Flood Protection of 1963	\$ 5.0
	Dacca-Demra-Narayanganj of 1962	\$ 1.0
	Chandpur I of 1964 ^{e/}	\$ 9.0
Agricultural Credit	Share of ADB I of 1965	\$27.0 ^{f/}
	Share of ADB II of 1968 ^{e/}	\$10.0 ^{g/}
Transport	River: IWTA II of 1965	\$ 5.3
	IWTA I of 1962	\$ 2.0

Small Country Study - Paraguay

Highways II of 1964	\$ 2.2
Highways I of 1961	\$ 6.0
Livestock I of 1964	\$ 3.6
Agriculture & Transport of 1951	\$ 5.0

Country Study - Peru

Agriculture	Agricultural Credit VI (Banco Agropec) of 1965	\$15.0
	Agricultural Credit V (Banco Agropec) of 1960	\$ 5.0
	Agricultural Credit IV (Banco Agropec) of 1957	\$ 5.0
	Agricultural Credit III (Banco Agropec) of 1955	\$ 5.0
	Agricultural Credit II (Farm Mech.) of 1954	\$ 1.7
	Agricultural Credit I (Farm Mech.) of 1953	\$ 1.3
	Irrigation I (Quiros-Piura) of 1955	\$18.0
Industry Power	Pacasmayo Cement of 1955	\$ 2.5
	Power III (EEA) of 1967	\$ 2.5
	Power II (EEA) of 1964	\$15.0
	Power I (EEA) of 1960	\$24.0

Transport	Highways III of 1962	\$10.0
	Highways II of 1961	\$ 5.5
	Highways I of 1956	\$ 5.0
	Railways II ^{h/} of 1963	\$13.3
	Ports III of 1964	\$ 3.1
	Ports II (Callao) of 1959	\$ 6.6
	Ports I (Callao) of 1952	\$ 2.5

-
- a/ Already reviewed in 1965-67 by the Economics Department (Mr. Van der Tak).
b/ Of the \$ 93.8 million included in these loans an estimated \$23.4 million went to Bangladesh.
c/ Of the \$49.2 million included in these loans an estimated \$13.4 million went to Bangladesh.
d/ Bangladesh share of each of these two \$30.0 million loans estimated at \$8.1 million.
e/ Disbursements completed in FY1971.
f/ Bangladesh share of \$9.0 million out of total \$27.0 million.
g/ Bangladesh share of \$2.9 million out of total \$10.0 million.
h/ Railways I of 1959 was cancelled in totality.

FY1976 WORK PROGRAM

Individual Projects

India	Port of Bombay of 1963	\$18.0
Nigeria	Northern Road of 1965	\$15.5
Chile	Industry (Milk & Meat Processing) of 1964	\$ 5.0
Philippines	Water Supply (NAWASA - Manila) of 1965	\$20.2
Venezuela	Telecom I of 1966	\$37.0
Venezuela	Water Supply (Caracas) of 1966	\$21.3
Jamaica	Power I of 1966	\$22.0
Honduras	Port of Cortes of 1967	\$ 4.8
Singapore	Telecom I (STB) of 1968	\$ 3.0
Somalia	Highway I of 1965	\$ 6.2
Morocco	BNDE II of 1966	\$17.5

Project Series

India	Power in Bombay IV (Koyna) of 1963	\$17.5
	Power in Bombay III (Koyna) of 1959	\$25.0
	Power in Bombay II (Trombay) of 1957	\$ 9.8
	Power in Bombay I (Trombay) of 1955	\$16.2
Bolivia	Power I (ENDE) of 1965	\$10.0
	Power II (BPC) of 1965	\$ 5.0
Korea	Railways II of 1968	\$11.0
	Railways I of 1963	\$14.0
Mexico	Highways II of 1964	\$40.0
	Highways I of 1961	\$25.0
Uruguay	Livestock II of 1965	\$12.7
	Livestock I of 1960	\$ 7.0
India	Power in Andhra II (Kothagudem) of 1965	\$14.0
	Power in Andhra I (Kothagudem) of 1963	\$20.0
Nicaragua	Power VI (ENALUF) of 1967	\$ 5.0
	Power V (ENALUF) of 1960	\$12.5
	Power IV (ENALUF) of 1957	\$ 1.6
	Power III (ENALUF) of 1956	\$ 7.1
	Power II of 1956	\$ 0.4
	Power I of 1954	\$ 0.5
Yugoslavia	Highways II of 1967	\$10.0
	Highways I of 1963	\$35.0
Cyprus	Power II of 1967	\$ 2.8
	Power I of 1963	\$21.0
Iran	IMDBI III of 1967	\$25.0
	IMDBI II of 1966	\$10.0
	IMDBI I of 1960	\$ 5.2
Pakistan (W)	Ag. Credit - Share of ADB II of 1968	\$10.0 ^{a/}
	Ag. Credit - Share of ADB I of 1965	\$27.0 ^{b/}

Comparative Project Review

Trucking and Road Transport Industry Structure and its effect on Generation and Distribution of Project Benefits: experience under selected projects, probably including Thailand Highways I of 1963 (\$35.0) and others. (More detailed proposal already sketched).

Sector Studies

Turkey - Water Development in Seyhan Valley

Seyhan Irrigation of 1963	\$20.0
Seyhan Multipurpose of 1952	\$25.2
Cukurova Power I of 1963	\$ 1.7

Pakistan (W) - Transport Sector

Western Railway II of 1967	\$13.5
Western Railway I of 1964	\$25.0
Share of Railways V of 1963	\$ 4.8 ^{c/}
Share of Railways IV of 1963	\$18.3 ^{c/}
Share of Railways III of 1960	\$12.5 ^{c/}
Share of Railways II of 1958	\$31.0 ^{c/}
Share of Railways I of 1952	\$27.2 ^{c/}
Share of Commercial Vehicles of 1966	\$25.0 ^{d/}

Small Country Study - Swaziland

Power II of 1967	\$ 2.8
Power I of 1963	\$ 4.2
Highways I of 1962	\$ 2.8

Country/Regional Study - East Africa

Kenya	Agriculture and Roads of 1960	\$ 5.6
	Land Settlement of 1961	\$ 8.4 ^{e/}
Tanzania	Education I of 1964	\$ 4.6
Uganda	Power Transmission (UEB) of 1961	\$ 8.4
Kenya	Highways I of 1965	\$ 4.5
	Tea Roads of 1965	\$ 3.0

Tanzania	Highways I of 1964	\$14.0
E. Africa	Railways II - EAR of 1966	\$32.4
	Railways I - EARH of 1955	\$24.0
	Ports I - EAH of 1966	\$ 5.6

-
- a/ Pakistan (W) share was \$18.0 million out of \$27.0 million.
b/ Pakistan (W) share was \$7.1 million out of \$10.0 million.
c/ Pakistan (W) share of the \$93.8 million of these loans was \$70.4 million.
d/ Pakistan (W) share of this \$25.0 million loan was about \$21.0 million.
e/ \$5.4 million of this loan was cancelled.

Projects Fully Disbursed Through FY 1971, But Not Included in the Previous Table

ATI

No.	Country	Project Name	Amount (US\$ million)	Evaluate
I Project Preparation Loans and Credits				
S 1 GUI	Guinea	Boke Eng.	1.7	
Cr3	Cameroon	Highway Eng. Project	.6	
Cr2	Malawi	Highway Eng. Project	.5	
II Evaluated Projects				
Cr21	India	Sone Irrigation Project	15.0	CES
Cr23	India	Purna Irrigation Project	13.0	CES
Cr93	Kenya	Education Project	7.0	CES
Cr29	Tunisia	Education Project	5.0	CES
308 AR	Argentina	Power - Servicios Electricos del Gran Buenos Aires	95.0 - 1965	OED
525 AR	Argentina	Power - Servicios Electricos del Gran Buenos Aires	55.0 - 1970	OED
211 BR	Brazil	Furnas - Centrais Electricas S.A.	73.0 - 1966	OED
43 CO	Colombia	Roads	16.5	OED
68 CO	Colombia	Railways	25.0	OED
84 CO	Colombia	Roads	14.4	OED
144 CO	Colombia	Roads	16.5	OED
Cr5/Ln295	Colombia	Roads	39.0	OED
18 CO	Colombia	Agriculture - Caja de Credito	5.0	OED
108 CO	Colombia	Agriculture - Caja de Credito	5.0	OED
38 CO	Colombia	Power - Chidral	3.5	OED
113 CO	Colombia	Power - Chidral	4.5	OED
215 CO	Colombia	Power - Chidral	2.8	OED
255 CO	Colombia	Power - CVC/Chidral	25.0	OED
339 CO	Colombia	Power - CVC/Chidral	8.8	OED
39 CO	Colombia	Power - Caldas Hidro-Elec. Co.	2.6	OED
217 CO	Colombia	Power - Caldas Hidro-Elec. Co.	4.6	OED
54 CO	Colombia	Power - Hidroelectrica del Rio Lebrija	2.4	OED
225 CO	Colombia	Power - Empresas Publicas de Medellin	12.0	OED
282 CO	Colombia	Power - Empresas Publicas de Medellin	22.0	OED
246 CO	Colombia	Power - Empresa de Energia Electrica de Bogota	17.6	OED
313 CO	Colombia	Power - Empresa de Energia Electrica de Bogota	50.0	OED
347 CO	Colombia	Power - Electricadora de Bolivar S.A.	5.0	OED
119 CO	Colombia	Railways - Ferrocarriles Nacionales	15.9	OED
267 CO	Colombia	Railways - Ferrocarriles Nacionales	5.4	OED
343 CO	Colombia	Railways - Ferrocarriles Nacionales	30.0	OED
310 GH	Ghana	Power - Volta River Authority	47.0 - 1971	OED
227 IRN	Iran	Roads	72.0	CES
210 MA	Malaysia	Power - National Electricity Board	35.6 - 1966	OED
350 MA	Malaysia	Power - National Electricity Board	51.9 - 1969	OED
12 ME	Mexico	Power - Comision Financiera	24.1 - 56	OED
13 ME	Mexico	Power - Comision Financiera	10.0 (Cancel)	OED
56 ME	Mexico	Power - Comision Financiera	29.7 - 59	OED
194 ME	Mexico	Power - Comision Financiera	34.0 - 62	OED
316 ME	Mexico	Power - Comision Financiera	130.0 - 65	OED
436 ME	Mexico	Power - Comision Financiera	110.0 - 67	OED
275 ME	Mexico	Irrigation - Financiera	15.0	CES
337 SI	Singapore	Power - Singapore	15.0 - 67	OED
473 SI	Singapore	Power - Public Utilities Board Singapore	10.0 - 1968	OED
280 TH	Thailand	Railways - State Railway of Thailand	22.0	CES
375	El Salvador	Roads - 1971		
III Part 1 Countries, Iceland and New Zealand				
	Australia	7 projects	417.7	
	Austria	9 projects	106.3	
	Belgium	4 projects	76.0	
	Denmark	3 projects	85.0	
	Finland	13 projects	221.8	
	France	2 projects	257.0	
	Iceland	7 projects	25.9	
	Italy	8 projects	399.6	
	Japan	31 projects	862.9	
	Luxembourg	1 project	12.0	
	Netherlands	8 projects	244.0	
	New Zealand	4 projects	102.0	
	Norway	6 projects	145.0	
	South Africa	11 projects	241.8	
Total (I+II+III)			4402.6	

Signature
1969
cit/ Poku

Digest of Comments Received to Date on the
Operations Evaluation Report: Colombia

General

Mr. Warren Baum (11/22/71) preliminary view: An ambitious and far-reaching study, undertaken in a highly professional manner, which should prove very useful. Some of the conclusions appear to result from applying a modern and untested definition of development to past events and it should be clarified that this definition differs from that used by the Bank in the past and that resultant conclusions must be treated with care. Insufficient distinction is made between Colombian and Bank shortcomings and the Bank is assumed too powerful. Study should emphasize the difficult judgments that were involved in defining the 'without' (the project or the Bank) case in assessing impact. More attention in Conclusions to trend over time in Bank performance. More should have been said of other lending agencies' activities.

Mr. Robert Sadove (1/7/72): Such a thorough and impartial self-probing is a milestone in history of Bank. Report is technically competent, perceptive, relevant and constructive. Reassuring in showing that, on the whole, Bank has done a most commendable job and that project approach is right. Problem of design standards would merit even more attention than given. We should have: (a) staff seminar to discuss report, (b) procedure for sending part of the report to the Board and publication, (c) progress in Bank entering housing field, as recommended.

Mr. Mervyn Weiner (1/7/72): Report is thought provoking and excellent in parts. Central weakness is inadequate presentation of way in which past circumstances and objectives constrained decisions. Conclusions and recommendations are, in the main, already current practice. Insufficient attention to other lending agencies and to Bank's need to allocate scarce staff resources and so make choices. More careful distinction should be drawn between comments evaluating performance under the Bank's objectives and those evaluating the Bank's objectives themselves. The long-run issues recommended for planning attention (demographic, urbanization, market structures, etc.) are probably best neglected in developing countries because of latter's staff/institutional constraints.

Mr. Dennis Anderson (1/20/72): Rough analysis (for Mr. Henderson) of the 74 recommendations in the report suggests that 6 are regularly recognizable in current operational practice, 38 are occasionally recognizable, 28 are recognizable as under discussion for action and 15 are not recognizable in Bank work. Bank probably aware of most problems, but action meager. Authors

could not deal with potential contribution of other agencies or with Bank staff constraints, but more recognition of those points is needed in text, and, more importantly, discussion in Bank as to how to respond. Review of recommendations on power, as an instance, shows Bank probably could respond positively, if modestly, to each.

Transportation

Mr. David Knox (1/27/72): A thought-provoking and undoubtedly useful undertaking. Agree with most recommendations for future but doubt many specific findings on past projects. Study shows Bank's great need for better project monitoring system for both costs and benefits. We do not favor highway sector lending: proper project control still requires tying loan funds to particular projects/contracts. More attention needed in the report to possible impact of possible price distortions, reducing railway traffic and hence making Atlantic Railroad less apparently economic than it would have been with more rational traffic allocation; also, highway vehicle operating costs may have been underestimated. Various problems in simulation models used may have biased analysis against Atlantic Railroad; needs checking before conclusions finalized. Railway rehabilitation investments may also have been less marginal than implied by simulation model, mainly because of oversimplifications built into the latter, which have led to some misleading emphases in prescriptions about how productivity of the investments might have been increased. Agree that Bank supervision of the railway projects has been poor. Generally agree with conclusions on highway projects and need for more feeder road effort. Not certain that trunk highways have been overdesigned as alleged. Agree with need for more Bank attention to structural prerequisites and complementary investments for securing full development benefits from transport infrastructure projects.

Mr. Mervyn Weiner (1/7/72): Some factors discussed in connection with apparent low return on Atlantic Railroad -- administrative problems, contractor failures, Violenia, inefficient road/rail traffic allocation, etc. -- could be selectively regrouped to prove that the decision to build it was not a mistake, whatever the actual outcome of the project. Hence conclusions should be more qualified and reserved.

Mr. Cengiz Yucel (Economics Dept.) (1/20/72): The presentation should be more rigorous and explain more fully the methodology employed; the conclusions should be stated in more definite language. More attention should have been given to transport coordination, regulatory framework, consistency between financial and economic incentives and effects of transport costs on locational decisions.

Electric Power

Mr. Mervyn Weiner (1/7/72): Some of the phrases used are not Bank language,

and differences in the situation over time and between different regions do not come out sufficiently clearly. By putting together statements from different parts of the report one can give the effect of internal contradictions. Critical phrases should be avoided, especially in connection with Bank policies, eg. on economic report coverage. (No comments yet received on recommendations.)

Mr. Frederick Howell (12/16/71): A fascinating study which nevertheless fails to give us guidance or techniques whereby we could have made better decisions at the time when these decisions had to be made. Insufficient attention to staff constraints and to limited capacity of Bank to affect situation. In discussing deficiencies in power sector too much weight is given to inadequate planning compared with bad financial structure. Discussion of transmission/distribution lags needs clarification. Proof should be given that changed tariff structure will affect power demand and that a certain amount of rural electrification is worthwhile. (Mr. Howell has also made a large number of highly useful specific comments on the substance of the report.)

Mr. Thomas Berrie (12/22/71): The report is too shallow and does not help the Projects Group in any significant way to improve the appraisal process; generally agrees however with the analyses and with the recommendations made. (Appears to be seeking methodological developments.)

Paz del Rio Steel Mill

Mr. Hans Fuchs (1/3/72): A generally fair and well-balanced analysis of a project which was not well handled by the Bank. Considers in detail, and agrees with, most of the conclusions drawn in the report about ways to avoid repetition of these problems; most of the lessons are indeed already being applied, since this is a fairly old project. Disagrees with the suggestion that project consultants not be changed between feasibility and engineering/supervision stages because, in industrial projects, the tasks are too different. More evaluations should be done, and team should be strengthened on technical side. (I have been over Mr. Fuchs' memo with him in detail.)

Corporaciones Financieras

(Comments not yet received.)

Agriculture

(General comments not yet received, but some comments of Agriculture Projects

Department's Divisions on specific projects analyzed have been received and they are briefly referred to below):

- (i) Atlantico III irrigation and land reclamation project -- Performance under the project to date has been quite poor compared with appraisal report projections in several important respects and the data used in the evaluation report is not disputed; returns would probably have been much better had the project been located elsewhere in Colombia. However the Division is more optimistic about the effects that some measures could have in the future: flood protection works, sub-soiling and other new cultivation techniques, fertilizer, changed cropping pattern. Evaluation report overestimated labor costs but may be right in showing less farmers will be settled than expected.
- (ii) Livestock -- No dispute with the data, but disagree greatly with the interpretation of it: changes in herd size and structure are much more in line with what could and should have been expected than implied by the evaluation report. It is too early to tell whether the project is resulting in changes in any of the basic productivity parameters such as calving rates.
- (iii) Credit for Medium Farmers -- The project has indeed been unsuccessful but more as a result of political/administrative problems and shortage of Pesos than because of the lack of demand for additional credit which is stressed in the evaluation; the evaluation's econometric analysis of the effects of credit on productivity is misleading because it covers only advanced farmers, long enjoying irrigation.

Mr. Mervyn Weiner (1/7/72): The good recommendation that the Bank must clarify its views about land reform now does not mean that failure to do so in the past was a mistake, even though problems of rural poverty and inefficiency in resource use have long been serious. Text should make clear that land reform was felt to be a purely distributive matter and hence ultra vires for Bank.

Mr. Owen Price (Economics Dept.) (11/11/71): Land reform probably has an important part to play in Colombia but it should be accompanied by other measures to which more stress should be given in report.

Mr. Gottfried Ablasser (Economics Dept.) (1/11/72): The report is valuable and makes rigorous analysis of extensive data. It shows that projects can be usefully evaluated during their implementation period, and it illustrates the crucial need to cover in evaluation studies Bank policy advice as well as projects.

Education

Mr. Duncan Ballantine (1/5/72): The report points usefully to some problems (eg. textbooks, teacher training). It makes one or two minor errors. On the critical issue of costs per student it is too early to be firm. Full-scale evaluations of education projects should include an educator and cover

the impact of the project on learning achievements and supply of trained manpower. Methodology which Education Projects Department is developing should help.

Mr. Jean-Pierre Jallade (Economics Dept.) (11/10/71): Basically a good evaluation, but a pity that it did not give more thorough attention to whether this was the right project to select. The higher pay arranged for teachers in Bank-supported schools may have had inflationary effects on teacher salaries more generally.

Water Supply

Mr. Charles Morse/Mr. Juergen Krombach (12/8/71): A thorough job. Largely agrees with the thrust of conclusions reached regarding strengths and weaknesses of performance, but feels that more attention should have been given to Bank role in getting coordinated water resources plan prepared and in securing other important changes through carefully applied pressure.

Family Planning

Mr. K. Kanagaratnam (12/29/71): Welcomes the case put for Bank activity in public health but feels that, in discussion of 1968-69 negotiations, insufficient recognition is given to Board viewpoint at the time; the report places undue stress on the matter of family planning targets and gives inadequate attention to fact that Colombians wanted to include in the project some components almost totally unrelated to family planning and were not prepared to make a major push in family planning.

NOTE: Comments from the Area Department not yet received due to overriding factors, Consultative Group meeting and possible program loan.

1/30/72

Sample Terms of Reference for Audit Studies

1. Trinidad & Tobago Power Project
2. Tunisia - Tunis-La Goulette Port Project
3. Yugoslavia - First Railway Project
4. Botswana - Highway Project
5. Jordan - Amman Water Supply Project
6. Pakistan (W) - Two Pipeline Projects
7. Honduras - Three Highway Projects

TO :

FROM :

SUBJECT: Terms of Reference - Trinidad & Tobago Power Project Audit

1. The Bank made a loan of \$23.5 million in FY1962 (Loan 293-TR) to the Trinidad and Tobago Electricity Commission (T & TEC) to cover the foreign exchange cost of a 2 x 50 MW first stage of an eventual 220 MW Port of Spain "B" thermal (gas or oil) station, transmission and distribution expansion and a 41-mile 16" gas pipeline to provide fuel for the generating station and other uses, all justified mainly on the basis of projected increases in demand for electricity and gas through 1970. A precondition of the loan was a revision of the Ordinance establishing T & TEC in order to give the entity more freedom of action. Loan actually completed disbursement in FY1968. A second loan of \$2 million (Loan 601-TR) was made in FY1969.

Objectives of the Project

2. To build the above-mentioned facilities within a total cost of \$37.7 million equivalent (including interest during construction) and with completion by 6/30/63 for the pipeline, 12/31/64 for generating unit no. 1, 12/31/65 for unit no. 2, and 12/31/65 for transmission and distribution (Unit cost of "B" station first stage would be \$160.4 per kw installed).

3. Firm generating capacity (i.e. total capacity less the largest single unit) would be sufficient to cover load through October 1970 (except for a brief period, 5/64-12/64, before completion of the first unit); system kwh sales would grow at 11.3% p.a. 1961-70 with a decline in the annual load factor from 59.7% to 56.8% over the same period (= 11.8% p.a. growth in peak load).

4. Unit generating costs at the new station would be US¢ 0.965 equivalent in 1966, assuming gas fuel prices, as contracted, of US¢ 10.9 per million BTU (= Mcf).

5. Industrial consumption of gas from the pipeline would result from all existing fuel oil users changing over to natural gas, with demand growing thereafter at 8% p.a. to reach peak required throughput of 1.2 MMcf in 1978.

6. T & TEC to finance 40.2% of capital requirements for expansion 1961-65 out of internal revenues and 45.8% 1961-70.

7. T & TEC to earn an average of about 7% p.a. on average net fixed assets in operation 1961-70.

8. Average revenues per kwh sold to fall to about BWI ¢ 3.9 in 1970.

Main Covenants

9. T & TEC to maintain an operating ratio (operating expenses including depreciation but excluding interest, as a ratio of operating revenues) not greater than 70%, calculated on the basis of a three-year moving average beginning January 1, 1962.
10. T & TEC to maintain a debt/equity ratio below 60/40 (treating advances from the Government as part of equity rather than debt).
11. Government to give prior notice to the Bank of any proposed changes in the T & TEC Ordinance and in T & TEC's top management appointments, in order that the Bank may comment thereon.

Assignment

12. You will study the appraisal report for this project and briefly review the project files and discuss the project with those in the Bank who have been principally concerned with it. You will prepare drafts for T & TEC of our revised standard tables on technical, financial and management aspects of power entities. You will then proceed to Trinidad & Tobago for a stay of not more than one week, with the T & TEC, to gather (1) data to complete the standard tables, (2) clear ideas as to the extent to which the above-mentioned project objectives and loan covenants were fulfilled and the schedule on which this was accomplished and reasons for significant deviations, (3) any other views and impressions regarding the success of the project and the performance of the entity. Except to the very minor extent that they are covered by the standard tables (or that they may arise in your canvass of views and impressions) you will not give analytical attention to matters such as design standards and system reliability, tariff structure, policies regarding new connections, gas pricing arrangements, alternative means that might have been used to meet the load, the balance of investment within the system (generation, transmission and distribution, etc.) and between electric power and other services, organizational problems of T & TEC. You will, within six weeks of starting work, complete a paper of not more than 20 double-spaced pages, for review within the Bank, covering the extent to which the project objectives and the loan covenants have been fulfilled and the reasons for any significant divergences therefrom.

TO :

FROM :

SUBJECT: Terms of Reference - Tunisia, Tunis-La Goulette Port Project Audit

1. The IBRD made a loan of \$7.0 million to Tunisia in FY1964 (Loan 380-TUN) to cover the foreign exchange cost of the improvements and extensions at the La Goulette part of the port system of Tunis-La Goulette. The project comprises the provision of cargo facilities at the existing quay, the construction of two additional berths, sheds and warehouses, the relocation of the road access to the port and the relocation of a breakwater. The estimated cost is \$11.4 million equivalent, including \$7.0 million foreign exchange. The local currency costs were to be covered out of the port authority's own resources. The project was to be completed in three years. Disbursements of this loan actually ended in FY1968. A second loan of \$8.5 million (Loan 573-TUN) was made in FY1969 for port modernization and improvement.

Objectives

2. The main objective of the 1964 project was to relieve congestion in the old port of Tunis by expanding and improving facilities at La Goulette. Tunis-La Goulette is the main commercial port in the country with 75 per cent of total imports, 4 per cent of exports and 50 per cent of the total traffic.

3. The project justification was based on detailed traffic projections, which indicated that the total at Tunis-La Goulette would go up from 2.36 million tons in 1962 to 2.84 million in 1971. Considering only general cargo (i.e., excluding bulk products that would not use the new facilities), the increase was from 1.22 million to 1.70 million tons. The relative importance of the old port at Tunis was expected to decrease from 67 to 29 per cent of the total.

4. Several alternative investments were analyzed, among them modernization of the old port at Tunis and expansion of other ports in the country. The conclusion was that the La Goulette project was the best alternative. The benefits considered for calculating the economic rate of return were savings in ships' time and canal fees (estimated at 35.7 cents per ton); in cargo handling costs (\$2.0 per ton); and dredging and maintenance costs of the entrance canal and of the old port basin, estimated at \$381,000 per annum. Assuming an economic life of the project of 30 years, and keeping these unit savings constant, the return was 12.5 per cent. The use of larger, more economical ships and the impact on foreign trade were mentioned but not quantified.

5. The project also included setting up a new autonomous port authority (Office des Ports Nationaux Tunisiens). Financial information about the old operating agency, a government department, was poor and financial projections are very simple. It was expected that the operating ratio would remain about 75-80 per cent in the 1963-71 period.

Main Covenants

6. The main covenants were:
- (a) Creation of an independent port authority. Organization and general manager satisfactory to the Bank.
 - (b) Bank to be consulted about future port development in the country. Studies to be made.
 - (c) Study of present cargo handling and customs procedures, in order to improve their efficiency and establish appropriate regulations.
 - (d) The Ministry of Public Works would construct and maintain access roads necessary for the efficient operation of the project.
 - (e) The Government would provide adequate bulk grain-handling facilities.

Assignment

7. You will review the project files, especially the Bank's supervision reports, study the economic and technical reports on which the investment is based (prepared by B.C.E.O.M.; S.E.T.E.C., and Howell and Company, Accounting Consultants), discuss the project with people connected with it in the relevant operating departments, and reconstruct the calculations that led to the rate of return given above. You will then visit Tunisia where you will contact the port authorities, selected port users and the Ministry of Public Works, in order to check construction costs and schedules; traffic volumes and its allocation between the old port at Tunis and La Goulette; ship delays and turn-around time; evolution of the size of ships using the port; operating efficiency, especially cargo handling methods, and financial performance. The cost and traffic figures used in the appraisal should serve as a basis for most of these calculations; you will not attempt recalculation of unit costings assumed there unless new data is readily available. You will make a preliminary evaluation of the performance of the new Office des Ports Nationaux Tunisiens and of its impact on port operations.

8. You will also gather any views or impressions you can about the execution of the project and its impact, particularly on foreign trade, but you should not divert much time to the analysis of issues such as the distribution of the project benefits between the country and foreign shipping, the pricing structure, the distribution of traffic among the different ports in the country or the investment alternatives considered at the time of the appraisal. You will also take into account the impact of the 1969 Loan and assess whether this project should be evaluated, perhaps partially, with Loan 380-TUN. Within three months of initiating work you will submit a paper of not more than 50 double spaced pages, evaluating the execution of the project, the extent to which the above stated objectives have been or still promise to be achieved, and the factors accounting for any important divergences.

TO :

FROM :

SUBJECT: Terms of Reference - Audit of Yugoslavia First Railway Project

1. In FY1964, the Bank made a loan of \$ 35 million to Yugoslavia (Loan 361-YU) to help finance construction of a 195 km. standard gauge railway line Sarajevo-Ploce to replace the existing narrow gauge one. The justification of the project was the elimination of a serious bottleneck in Yugoslavia's railway system (Ploce is one of the main ports for foreign trade). The loan was fully disbursed on schedule, in FY1968. Two more loans (\$ 70 million of 1965 and \$ 50 million of 1968) have been made to the Yugoslavia Railways, but they have not yet been fully disbursed.

Objectives of the Project

2. To build this standard gauge railway line within a total cost of \$ 96.2 million and to start operations in January 1967.

3. The railway traffic in Yugoslavia was assumed to increase between 1962 and 1968 at an annual average rate of 4.5% for freight and 1.5% for passenger. Based on current tariffs and wage rates, operating ratios for the national system would improve from 87% in 1963 to 78% in 1968 and the rate of return on net operating fixed assets would rise from 4.4% in 1963 to 6.9% in 1968.

4. The main benefits of the project which could be measured in monetary terms were: (a) the savings from transferring 3.1 million tons annually from circuitous routes to the shorter Sarajevo-Ploce route (the average additional distance, due to the 1 million ton capacity of the then existing narrow gauge line, was 270 km.); (b) lower costs of carrying the existing traffic on the route (gauge conversion and electrification were expected to reduce the traction costs from Din 7.5 to Din 1.5 per gross ton-km.) and (c) reduced costs of reloading.

Benefit

	<u>Rate of Return on Total Investment</u>
More Direct Routing:	Freight 7.7
	Passengers 0.3
Reduced Costs for Existing Traffic:	Freight 3.0
	Passengers <u>1.0</u>
Total Rate of Return	12.0

The traffic (freight and passenger) on the Sarajevo-Ploce line was assumed to increase at an annual average rate of 3% from 1967 to 1977. The traffic density should reach 35,000 gross ton-km. per km. of line per day in 1968, which justified the electrification of the line. The estimated useful life of the investment was 40 years.

Main Covenant

5. The Government had agreed to call for international competitive bidding on works totalling \$ 12.1 million: 6.4 million for construction, 2.5 million for electrification equipment and 3.2 for signalling and telecommunications.

Assignment

6. You will study the project appraisal report and review the project files (especially the supervision reports), reconstruct the calculations that led to the 12% rate of return and discuss the project with people connected with it in the Transportation and EMENA Departments.

7. You will then proceed to Yugoslavia and contact the railway authorities to gather (i) data relating to actual costs (construction costs and schedules, operating costs) and actual benefits (distinguishing as much as possible between normal traffic and diverted traffic for both freight and passengers) of the project, (ii) relevant information about the above-mentioned loan covenant and (iii) data on operating ratios and rates of return on net operating fixed assets (from 1963) for the Yugoslav railways. You will not give analytical attention to matters such as tariff structures, road competition, enlargement works for the port of Ploce, and interim developments on the rest of the railways system (other than financial).

8. Back in Washington, you will recalculate the "actual" rate of return on the project investment, using the approach mentioned in the appraisal report, taking into account the actual costs and traffic, and making assumptions that now seem reasonable about operating costs on different sections of line, the future growth of traffic and the economic life of the investment. You will complete a paper of not more than 20 double-spaced pages, for review within the Bank, evaluating the execution of the project and the extent to which the project objectives, as stated in the appraisal report, have been or still promise to be achieved, and giving the main reasons for any significant divergences.

9. You should complete the draft of the paper within two months of starting work: about three weeks of "preparation" before going to Yugoslavia, two weeks for the "mission" (including travel time) and three weeks for the analysis of the collected data and the writing of the short evaluation report.

TO :

FROM :

SUBJECT: Terms of Reference - 1965 Botswana Highway Project Audit

1. The IDA made a credit of \$ 3.6 million in FY1965 to Botswana (Cr. 63-BEC) to cover most of the foreign exchange cost of the following project:

	<u>Cost</u> (\$ '000s)	<u>Traffic (ADT)</u> <u>1962</u> <u>1968</u>		<u>Internal</u> <u>Rate of</u> <u>Return</u>
<u>Construction & Reconstruction</u>				
Gaberones - Border				
- paved 7 miles (380	25	150	10%
- gravel 10 miles (
Palapye - Serowe				
- gravel 33 miles	508	50/60	80	8%
Francistown - Maun (E-W)				
a) Francistown-airport				
- paved 2 miles	90	500	650 (
b) Airport-Nata				(20-
- gravel 118 miles	718	50	100 (25%
c) Nata-Maun				(
- gravel 185 miles	<u>1044</u>	10	30 (
	2740			
<u>Betterment</u>				
Ramaquabana - Ramathlabama (418 miles) miscellaneous works (mainly bridges & culverts)	840	up to 200	200+	n.a.
<u>Maintenance</u>				
12 depot buildings	110			
Equipment (trucks, loader, graders)	280			
Training	140			
48 bore holes to provide water along roads	90			
<u>Contingencies</u>	<u>400</u>			
TOTAL	4600			

The project was to be completed in three years. Disbursements out of the credit actually ended in FY1969.

Objectives of the Project

2. The project was the outcome of studies proposed by the Bank and advice proffered by it from 1961 to 1964. Essentially it constituted the transport portion of the 1963-68 development plan for the country. Livestock then accounted for 85% of Botswana's employment and exports and a 1963 FAO mission had found road development crucial for livestock industry expansion, alone enabling some increase in production, redistribution of cattle from overstocked areas, and economies from trucking instead of trekking cattle.
3. Life of road improvements made was assumed to be 20 years and traffic was assumed to increase from projected 1968 levels shown above at 4% p.a. for the first ten years and 2% for the second ten years.
4. Internal rates of return on investments were calculated, as shown above; they take account only of road user cost savings except in the case of Francistown-Maun road for which increases in cattle prices expected to result from the road were also attributed as benefits. This was much the most important project road. Cattle prices to farmers in Maun area were expected to increase from £ 12 per head to £ 19 per head, and cattle sales from the area to increase from 10 - 12 thousand head per year to 15 - 18 thousand, both by about 1969.
5. Betterment of the main north-south road was to enable it to be kept open to all-weather traffic and to make it safer. Maintenance program was designed to enable general improvement in quality and quantity of maintenance personnel and work, to reach adequate levels.

Important Covenant

6. Government indicated specific target levels of budgetary provision for highway maintenance through FY1965/66 and also gave assurance it would provide any additional funds required to enable adequate maintenance.

Assignment

7. You will briefly review the project files, especially the Bank's supervision reports, discuss the project with people connected with it in the relevant operating departments, and roughly reconstruct the calculations that led to the rates of return given above. You will proceed to Botswana where you will contact the highway authorities and the livestock authorities only, in order to check actual developments regarding costs, construction schedules, maintenance, traffic volumes, cattle prices, cattle sales, as projected and noted above. You will also gather any views or impressions you can about the execution of the project and its impact, particularly on the livestock industry and opening up of new lands, but you should not divert substantial amounts of time to intensive analysis of issues such as

design standards, road-rail competition, relative priority of other roads, transport industry structure, actual vehicle operating costs. You will recalculate 'actual' rates of return on the roads, for comparison with those estimated in the appraisal report, using data on traffic volumes and the livestock industry mentioned above, making assumptions that now seem reasonable about the roads' life and future growth of traffic and probably keeping to appraisal report estimates of vehicle operating costs under different conditions unless better data is readily available. Within two months of initiating work you will submit a paper of not more than 30 double-spaced pages, for review within the Bank, evaluating the execution of the project, the extent to which above-stated objectives have been or still promise to be achieved, and the reasons for significant deviations.

TO :

FROM :

SUBJECT : Terms of Reference - Audit of 1961 Amman Water Supply Project

1. The IDA made a credit of \$ 2.0 million in FY1962 to Jordan (Gr. 18-JO) to cover two-thirds of the total cost, including interest during construction of a water supply project. Credit disbursements were completed in FY1968.
2. This credit included \$ 1.5 million for a basic project consisting of a raw water supply system with a capacity of 880 m³/hour and a 3,000 m³ reservoir, the extension by 40 km. of mains and improvement of the distribution system, and water treatment facilities; the credit included also \$ 0.5 million for additional water treatment facilities to be carried out if found necessary during construction of the basic project.
3. The project was justified by a lack of public service (at the time of appraisal, at least one-third of the city's 200,000 inhabitants were without public services), frequent water shortages, the poor quality of the water, and the future demand forecast related to the expected growth of population through 1972.

Objectives of the Project

4. To build by the end of 1963 the basic project designed to increase the capacity of the water supply system from 620 m³/hour to 1,500 m³/hour within a total cost of \$ 2.32 million (including \$ 0.18 million interest during construction).
5. To build by the end of 1964 the additional water treatment facilities, if found necessary, within a total cost of \$ 0.73 million (including \$ 0.02 million interest).
6. Sales were projected to increase by 8.3% p.a. from 2,518 thousand cubic meters in 1960 to 6,588 thousand cubic meters by 1972.
7. Consumption per capita per day would rise from about 35 lpcd in 1960 to about 50 lpcd by 1972. This would only raise the average consumption of the poorest classes to 25 lpcd.
8. Project was expected to improve health conditions through better water quality and to help development of tourist industry.
9. Reduction in water losses from 39% in 1960 to 20% in 1972.

10. Financial objective: water rates to be maintained at a level adequate to cover current expenditures, debt service and a reasonable part of future expansion costs. 1/

Main Covenants

11. The main covenants were as follows:

- Amman should hire before project construction an efficient management team for the Water Department, and train local personnel.
- Water Department to be established with autonomy from Municipality and with separate accounts after appointment of a new director for the Department.
- Establishment of accounting system and inventory control.
- Other works not be undertaken without IDA's approval.
- Use of consultants.

Assignment

12. You will study the appraisal report for this project and briefly review the project files and discuss the project with those in the Bank who have been principally concerned with it. From files you will prepare drafts of our revised standard tables on technical, financial and management aspects of water entities. You will then proceed to Amman for a stay of no more than two weeks to gather data to complete the standard tables. You will particularly study the evolution of the water rates relative to the above-mentioned targets. You will also follow the variations of the tariff structure in particular with respect to low-consumption classes, which was a matter of concern at the time of appraisal, and gather clear ideas as to the extent to which the above-mentioned project objectives and loan covenants were fulfilled, and the schedule on which this was accomplished and reasons for significant deviations. You will pay particular attention to the planned reorganization of the Water Department and of its accounting system. And you will gather any information available about the effects of the water system improvement on water quality, health (building on the indicators given in the appraisal report regarding the incidence of water-borne diseases) and, if there is any evidence available, tourist trade.

13. You will within 8 weeks of starting work, complete a paper of no more than 20 double-spaced pages, for review within the Bank, covering the extent to which the project objectives and the loan covenants have been fulfilled and the reasons for any significant divergences therefrom.

1/ These objectives are not precisely quantified in the appraisal report. However, financial projections were made assuming a 25% rate increase leading to full coverage of subsequent expansion programs out of internal funds.

TO :

FROM :

SUBJECT : Terms of Reference - Audit of 2 pipelines projects in West Pakistan

1. In FY 1954, the Bank extended a loan of \$ 14.0 million (Loan 93-PAK), to the Sui Gas Transmission Company (SGTC), partially financing the construction of a 346-mile 16" pipeline from Sui, the newly developed site of extensive natural gas reserves, to Karachi, via Sukkur and Hyderabad. The project, representing a total investment of \$ 25.0 million, was to be an important step in the development of Pakistan's indigenous fuel resources and to benefit the economy by reducing the outflow of foreign exchange for fuel imports.

2. Ten years later, in FY 1964, the Bank extended a similar loan of \$ 15.0 million (Loan 377-PAK) to Sui Northern Gas Pipeline, Ltd. (SNGPL). This loan provided a major portion of the foreign exchange requirements needed to construct a 378-mile pipeline, which, in conjunction with two existing gas systems, was designed to transmit natural gas from the Sui and Dhulian fields to the northern industrial areas. Like its predecessor, this project, which involved a total investment of \$ 59.8 million, was to reduce the foreign exchange expenditures for imported fuels, and it was hoped that the availability of cheap fuel would provide a stimulus for industrial development in the areas supplied by the pipeline.

3. Disbursements out of these two loans ended in FY 1956 (SGTC) and FY 1968 (SNGPL). In FY 1969 the Bank extended a second loan to SNGPL (Loan 597-PAK of \$ 8.0 million) and in FY 1970 a third loan (Loan 696-PAK of \$19.2 million); neither is yet fully disbursed.

Objectives of SGTC Project:

4. To install the pipeline (including connections to eight large consumers) and necessary safety and communication equipment associated with its operation, with completion by June 1955.

5. To maintain an average dividend on share capital of not less than 10%, while achieving the following average price targets for various stages of output:

Vol/day (MMcf) ^{1/}	37	50	70	110
Price of gas per 1000 cu.ft. (in Rs.)				
Cost of gas	.63	.63	.50	.38
Transmission charges	<u>1.11</u>	<u>.95</u>	<u>.72</u>	<u>.50</u>
Total	1.74	1.58	1.22	.88

1/ Million cubic feet.

6. The estimated initial consumption level of 37 MMcf/day assumed the conversion of large industrial installations from existing fuels to natural gas, while the expected growth of demand (to 67 million cu. ft./day in 1960, and to the capacity throughout of 110 MMcf/day in 1963) was primarily based upon projections for the planned industrial development of the area served by the pipeline.

7. As regards foreign exchange savings, it was estimated that the net saving would approximate \$ 2.8 million, when volume was 37 MMcf/day, and \$ 12.3 million, when volume reached the capacity of 110 MMcf/day.

8. To attain an increasing competitive price advantage, in relation to other fuels, so that at full capacity the cost of gas to the consumer would approximate 50% of the cost of fuel oil.

Objectives of the SNGPL Projects

9. To acquire two existing gas systems, the Sui-Multan and Dhulian-Rawalpindi, and to complete by July 1965 a new 378-mile pipeline, which, together with the existing systems would primarily service the areas of Multan, Lyallpur, Lahore, Gharibwal-Dandot, and Rawalpindi. To a greater extent than in the SGTC project, the consumers were to be large industrial users, e.g. WAPDA power stations, cement and fertilizer manufacturers.

10. To minimize the amount of borrowing needed to finance future capital expenditures, such as the interconnection of the two gas systems and the addition of two compressor stations.

11. To maintain a reasonable dividend (10% in most years) on share capital while attempting to remain within the following rate structure:

WAPDA and other Electricity Companies	PRs. 2.05 - 2.25/Mcf ^{1/}
Fertilizer Factories	PRs. 2.05/Mcf
Cement Factories	PRs. 2.60/Mcf
Other Industries	PRs. 2.80/Mcf

12. To generate sufficient funds to meet all operating expenses, cover debt service, and produce a reasonable surplus for future needs. Overall return on investment is expected to range between 5.6% and 11.8% over the period 1966-77 with an average of 8.1%.

13. To result in an annual average foreign exchange saving of \$ 7.8 million (not including the foreign exchange costs of transportation) over the period 1966-77.

1/ i.e. thousand cubic feet.

Main Covenants

14. The main covenants of the two projects were:

(1) SGTC Project:

That the company's debt:equity ratio not exceed 55:45.

(2) SNGPL Project:

That the debt:equity ratio not exceed 60:40 after the construction period.

That capital expenditures not exceed \$ 1.5 million equivalent per year without the Bank's approval.

That dividends would only be distributed if current assets exceeded current liabilities by a ratio of 1.5 to 1.0.

Assignment

15. You will study the two appraisal reports, review the project file (especially the supervision reports) and relevant parts of the Indus Special Study, roughly reconstruct the calculations that led to the cost and financial projections, and discuss the projects with people who have been connected with them.

16. You will then proceed to West Pakistan and contact SGTC and SNGPL to gather: (1) data relating to actual costs (construction costs and schedules, operating costs) and actual benefits (mainly production volumes, company earnings and costs and prices of imported fuels), (2) data on the implementation of the other objectives as above-mentioned, (3) relevant information about the implementation of the main loan covenants and (4) any views or impressions about the stimulus that supply of natural gas has given to industrial development.

17. Back in Washington, you will complete a paper of not more than 30 double-spaced pages, for review within the Bank, evaluating the execution of the two projects and the extent to which their objectives, as stated in the appraisal reports, have been or still promise to be achieved, and giving the main reasons for any significant divergences.

18. You should complete this paper within ten weeks: about three weeks of "preparation" before going to West Pakistan, three weeks for the mission itself (including travel time) and four weeks for the writing of the audit report.

TO :

FROM :

SUBJECT: Terms of Reference - Honduras Highways Projects Series Audit

1. The World Bank Group has made three loans to Honduras for highway development, the last of which completed disbursement in FY1968. These loans are:

Loan 135-HO	\$ 4.2 million	FY 1956
Loan 195-HO	\$ 5.5 million	FY 1958
Credit No. 1	<u>\$ 9.0 million</u>	FY 1961
TOTAL	\$18.7 million	

2. Loan 135-HO was mainly for maintenance and for feasibility studies of future road investments. Loans 195-HO and IDA Credit 1 continued the provision of funds for maintenance, but mostly they financed new construction and improvement on the Northern Highway, which joins Tegucigalpa with Puerto Cortes, on the Atlantic coast, on the road that connects Tegucigalpa with the Pan-American Highway, and on the Western Highway, which connects Puerto Cortes with the Salvadorean border, west of Tegucigalpa.

A. Loan 135-HO of 1956

3. <u>Detail of Project:</u>	Cost <u>(\$'000s)</u>
Road maintenance equipment and spare parts	1800
Machinery and building materials for work-shops (maintenance) office inventory	700
Materials and supplies	650
Consultants' fees and technical assistance	650
Contingencies	<u>400</u>
TOTAL	4200

The project, for which \$ 4.0 million equivalent of local currency was also estimated to be required, was to be completed in two years. Disbursements of the loan actually ended in FY 1964.

Objectives

4. The purpose of the loan was to assist in financing the cost of establishing and equipping a highway maintenance organization, the cost of consultants required for that task, and that of preliminary engineering studies for investments on the Northern and Western highways.

5. Once the whole program was in operation, the maintenance program was supposed to produce benefits of \$ 1 million a year, composed of reduction in transport rates and increased life of roads. The development impact of the better maintained roads, especially in terms of national integration, was mentioned but not quantified.

B. Loan 195-HO of 1958

6. Detail of Project:

	Local Currency Cost <u>(\$'000s equiv)</u>	Foreign Currency Cost <u>(\$'000s equiv)</u>	Total Cost <u>(\$'000s equiv)</u>
Bufalo - Puerto Cortes Highway (pavement, 72 kms.)	1460	2475	3935
Bridges of Western Highway	1709	1600	3309
Southern Highway (pavement, 50 kms.)	213	325	538
Western Highway Extension (engineering services)	100	300	400
Contingencies	<u>1518</u>	<u>800</u>	<u>2318</u>
TOTAL	5000	5500	10500

The local currency cost was to be financed with a loan from the United States Development Loan Fund and the project was to be completed in three years. Disbursements of the loan actually ended in FY 1966.

Objectives

7. The objectives of the project were:

- a) construction of a paved highway between Bufalo and Puerto Cortes, part of the Northern Highway which connects Tegucigalpa with Puerto Cortes
- b) construction of bridges and culverts on the Western Highway from Chamelecon to Santa Rosa de Copan
- c) pavement of the Southern Highway from Tegucigalpa to the intersection with the Interamerican Highway
- d) detailed engineering for the extension of the Western Highway from Santa Rosa de Copan to the Salvadorean border

8. The economic justification of the Bufalo-Puerto Cortes highway was made in some detail. Vehicle operating costs were supposed to be reduced by at least 30 per cent. This reduction would generate a return on the investment of 10 per cent on the basis of the traffic existing at the time of the appraisal. Average daily traffic was estimated at 260 vehicles. Since this road is parallel to a railway, it was expected that the railway would lose 275,000 tons and 475,000 passengers of its traffic. Savings from reduced road-rail transshipments on this traffic are mentioned but not quantified. Finally, the appraisal indicates that the opening up of new lands induced by the rest of the highway program would create new traffic on this road, but without indicating its level.

9. The other investments in the program were justified in very general terms. The paving of the Southern Highway was based both on reductions in operating costs for the 250 - 300 daily vehicles using it and in road maintenance costs, but the benefits were not quantified. Improvements and engineering on the Western Highway were justified with the "penetration road" argument. Partial traffic counts in 1956 showed an ADT of 80 vehicles.

Important Covenants

10. The main covenants were:

- a) continuation of the maintenance program supervised by consultants
- b) restriction on highway construction work outside the project

C. IDA Credit 1 of 1961

11. Detail of Project:

	Local Currency Cost <u>(\$'000s equiv)</u>	Foreign Currency Cost <u>(\$'000s equiv)</u>	Total Cost <u>(\$'000s equiv)</u>
Western Highway Extension	4606	6096	10702
Feeder Roads to the Western Highway (unspecified)	645	855	1500
Continuation of Maintenance Program	58	1000	1058
Highway Planning Survey	<u>50</u>	<u>200</u>	<u>250</u>
TOTAL	5359	8151	13510

In addition to the \$ 9.0 million provided by IDA, which already included the financing of some of the local currency expenses, the Government requested \$ 2.5 million from the IDB. The balance of funds required would come from budgetary appropriations. The project was to be completed in three and one half years. Disbursements from the credit actually ended in FY1968.

Objectives

12. The objectives of the project were:

- a) construction of the Western Highway Extension, which comprises 100 km. of gravel road from Santa Rosa de Copan to the El Salvador border, and feeder roads to it
- b) continuation of the maintenance program for another two years
- c) a planning survey of the country's highway system

13. The main item in the project is the Western Highway extension, which was justified on several counts. First, it would greatly reduce transport costs of food exports to El Salvador. The new route would be 700 km. shorter. It was estimated that 25,000 tons moved through the old route and savings in transport costs would be Lempiras 1.5 million a year, giving a return of 7 per cent on the investment. Traffic on the new road was expected to start at about 100 vehicles a day and grow to several hundred in 10 years (i.e. about 1971). It was also expected that a large proportion of subsistence agriculture in the area would switch to cash crops and that about 70,000 has. of new land would be brought into production. The gross value of agricultural production was supposed to grow from Lempiras 33 million to 56 million in 5 - 10 years. The effect of generally integrating the region with the rest of the country is also mentioned.

14. The continuation of the maintenance program was justified with the same reasons indicated in the previous appraisals (efficiency, reduction in transport costs, increased road life). The objectives of the highway planning survey would be to provide the Ministry of Public Works with a long-term guide to highway development and to create a highway planning office.

Covenants

15. The main covenants were:

- a) consultants would be retained for supervision of construction, continuation of the maintenance program and the highway planning survey
- b) the government would promote the agricultural development of the Western Region
- c) the acquisition of the rights of way for the highway extension would be completed in time to avoid delays in construction

D. Assignment

16. You will review the projects files, especially the Bank's supervision reports, study the consultants' reports on which the projects were based (especially those by Upham, Porter-Urquart Associated and Brown and

and Root, Inc.), discuss the project with people connected with it in the relevant Bank operating departments, at the IDB, U.S. AID and OAS, and reconstruct if possible, the calculations that led to the traffic projections, expected increases in agricultural production and rates of return given above. You will then visit Honduras where you will contact the highway authorities and those dealing with agricultural development and exports only. You will divide your audit effort into three major parts: the maintenance program and institution building, the Western Highway and its feeder roads, and the rest of the roads included in the projects. For maintenance and institution building, you will attempt to quantify as much as possible the improvements in maintenance and in the operations of the Highway Department that may have taken place; you will probably not be able to do much, if any, analysis of the direct expenditures on maintenance out of the Bank loans. For the Western Highway, you will calculate an ex-post rate of return, for comparison with that estimated in the appraisal report and based on the same principles, (and using the same figures for vehicle operating costs on different types of highway unless better figures are readily available), and you will also attempt to estimate the actual increases in agricultural production in the area of influence of the road, if possible within time available. For the rest of the roads, you will limit yourself to comparing actual versus estimated construction costs, traffic projections and rates of return, when applicable. You will also gather any views or impressions you can about the execution of the projects and their impact, particularly on national integration, foreign trade, and the influence of the political crisis with El Salvador on the outcome of the investments. Within five months of initiating work, you will submit a paper of not more than 80 double spaced pages, for review within the Bank, summarizing your findings and focussing on the extent to which the objectives as specified in the appraisal reports and described above have been accomplished and reasons for any deviations.