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OP - RESEARCH 1972/74 VII

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FOR FURTHER CORRESPONDENCE PLEASE SEE Volume VIII

RECORDS MANAGEMENT SECTION

OP-RESEARCH

Messrs. Leif E. Christoffersen and
Ted J. Davis
Stahis Panagides

April 30, 1974

Research Proposal on Family Size, Education Decisions and Labor Supply in Low Income Rural Households in Northeast Brazil

This proposal requests funds to collaborate with SUDENE and the University of Pernambuco in a joint research project to investigate the economics of rural household decisions as they relate to family size, schooling and labor supply. The objectives are laudable and the study could prove useful to the Bank's rural development program in the Northeast. I have serious reservations, however, as to the implementability of this proposal as it now stands. The manpower input from the Bank is inadequate and the links with local institutions, which will make or break this effort, are not clearly spelled out. I explain: For the social-behavior type of research proposed extensive and continuous exposure to the environment under investigation are necessary. It is not enough, in order to understand "nordestino" behavior, to have a survey at one end and computer analysis at the other. Submersion in the problem is needed. Questions posed by outsiders to campensinos are often poorly understood - price does not mean the same thing to the interviewer and interviewee. In this respect the retainment of sociologists, communication specialists and anthropologists are advisable - skills not present in the proposal.

More specifically the deficiencies of this proposal are:

(1) Professional Bank staff input is too small (2-FY75 and 2-FY76 man-months). The DRC/SUDENE survey employed an average of 30 man-months plus 24 man-months of research assistants.

(2) The institutional links with Brazil are not spelled out clearly. It is extremely difficult to find Brazilian professionals available for such tasks on a continuous and full time basis. The proposal assumes that they will be available.

(3) I do not see any link with the Population and Nutrition Projects department and I am concerned that this study becomes an "academic exercise" for its own sake.

I suggest that we raise these points with Messrs King and Moran and have their assurances as to how they propose to ameliorate them before approving this proposal.

SSPanagides:pm

D.P. Research

April 26, 1974

Mr. R. Pierce
Economist Intelligence Unit
Spencer House
27 St. James's Place
London SW1A 1NT
England

Dear Mr. Pierce:

Research Study: Impact of the Energy Crisis on Tourism

We have read your report with interest, and I would like to thank you for your efforts in meeting the very tight time schedule.

We are arranging for the payment of the rest of the agreed fee to be processed. This will need a statement from you of expenses incurred.

We find that the study meets the general objectives of the Terms of Reference, and we fully appreciate the constraints, both in time and money, under which it was done. We would, however, very much appreciate a brief technical appendix which describes the nature and operation of the macro-economic models used, the underlying assumptions as to prices, etc.

With best wishes,

Sincerely yours,

AH

Andrew Hayman
Tourism Projects Department

Cleared with and cc: Mr. Tolbert

AHayman:mcc

D.P. Research
april 25/74

EFFECTIVE PROTECTION AND INCENTIVES IN THE IVORY COAST:

SOME PRELIMINARY RESULTS FOR MANUFACTURING

Introduction

This is a progress report on part of the DRC research project on economic incentives and integration in West Africa. The project involves detailed country studies on Ivory Coast, Senegal, Ghana and Mali. Mali was chosen as representative of the situation of land locked countries in the region, such as Upper Volta and Niger. Much of the field work in Ivory Coast and Senegal is being done under contracts with local research institutes. We hope to make similar arrangements in Ghana.

By attempting to quantify the incentives to manufacturing and agricultural industries in these countries we hope to obtain some indication of comparative advantage in the region and to evaluate various policy options for individual countries and for the region as a whole. We wish to consider in particular the costs and benefits of greater regional economic integration and of association status with the EEC.1/ Both these subjects are of current practical interest, and it is hoped that the project will make some contribution by providing data and economic analysis not so far considered by people concerned with policy in the region. At the same time we hope that the individual country studies will be of some use to policymakers in the countries and to the Bank's operational work.

While the effective protection methodology used is well known, we propose to deal with several problems which - while discussed in the theoritical literature - have so far not been systematically considered in most empirical studies. These concern (a) the treatment and interpretation of preferential tariffs and other trading arrangements (b) the consequences of monopolistic or oligopolistic market structures (c) shadow pricing of factors of production, especially labor (d) protection and intra-industry trade. This is possible because the economies studied are small and we are able (in fact for many manufacturing industries, obliged) to work at firm level. Most previous effective protection studies have been at a higher level of aggregation.

The Ivory Coast Incentive System.

The main components of the Ivory Coast incentive system can be summed up as follows:

(1) High export taxes (over 20 percent) on the major commodity exports viz coffee, cocoa, and timber.2/

1/ A new regional economic grouping - the West African Economic Community - was established in January 1974. The Yaounde III meetings will be held in 1974. At these meetings the admission of other African states to association status with the EEC, as well as changes to existing rules, will be discussed.

2/ Export taxes per se plus differences between producer prices and selling prices of the commodity purchasing authority.

(2) Lower export taxes (0-12 percent) on other exported agricultural products e.g. cotton, unrefined palm oil, bananas, pineapples.

(3) Quota and tariff protection to some import replacing agricultural products e.g. vegetables, sugar, rice.

(4) Mainly tariff - but some quantitative - protection to import replacing manufacturing industries.

(5) Indirect subsidies to some exporting processing industries by the supply of inputs at below border prices.1/

The research so far has been mainly concerned with manufacturing and henceforth discussion is confined to this. Modern manufacturing is almost entirely owned and controlled by foreigners i.e. foreign (mainly French) firms and expatriates living in the Ivory Coast.

Apart from tariffs and quotas, the main protective device for industry is the provision under which firms may obtain agreements under the Investment Code by which they are exempted from duties on imported current inputs and machinery and equipment, for a 10 year period. In 1971 "priority firms" accounted for about two-thirds of value added in the modern industrial sector.

Other principal incentives include:

- a 5 year profit tax holiday for new factories or important extensions
- tax deductions for reinvested profits
- subsidised credit for priority and other important firms.

Inputs into manufactured exports may qualify for temporary admission. As nearly all manufactured exports are exempt from export taxes,2/ manufactured exports in principle are subject to zero or slightly negative rates of effective protection or subsidy.3/

The main indirect tax is a value added tax (TVA), which in general has no net protective effect since it is applied to both imports and domestic production at the same rate (subject to minor qualifications).

There are only two cases of direct subsidies. However a number of small fully or majority owned Ivorian firms have obtained ad hoc financial assistance from the government.

In principle government departments must pay normal tariffs if they import. The same applies to a variety of public and mixed corporations.

1/ E.g. timber processing, palm oil refining, pineapple canning.

2/ A few partially processed primary products pay export taxes e.g. sawn timber.

3/ Assuming no administrative cost of using the temporary admission system. In practice these may be considerable.

Until 1971 the tariff was relatively unescalated. However a large degree of de facto escalation was introduced by the duty exemptions on the inputs of priority firms, mentioned above. In 1973 the tariff was revised and the most important change was to increase the escalation of the tariff by reducing duties on intermediate materials and other intermediate inputs.

Although the tariff itself is fairly simple, an elaborate system of preferences is applied to industrial imports at rates ascending according to the following scheme:

(a) Specified products from Senegal, Upper Volta and Niger - duty free.

(b) Industrial products from UDEAO countries 1/ - one-half the duties on imports from EEC.

(c) Old EEC, 2/ and franc zone countries.

(d) "Minimum tariff" countries - all countries except (a), (b), (c) and (e) (including most developed countries outside the EEC).

(e) About 39 "general tariff" countries (mostly less developed).

This preferential structure can produce large differences in import duties, e.g., in the case of printed cloth ranging from zero (Senegal, Upper Volta and Niger) to 90 percent (general tariff countries). In many cases such as this one the general tariff duties are prohibitive. However at present only three general tariff countries (Argentina, Mexico and South Korea) are of any significance as exporters of manufactured goods. Japan was removed from the list in 1968.

In addition to quotas affecting the import of specific products (regardless of source) there is also a general quota system applied to all imports from non-EEC and non-franc zone sources. This quota is the residual (allocated by product categories) between estimated imports from the EEC and the franc zone (which are unrestricted) and a total annual import program decided in the light of overall balance of payments considerations. Because the balance of payments has been strong in recent years these quotas have apparently not been administered in a restrictive manner.

The preferential system may be affected by two important developments in the coming year. First, at the Yaounde III Conference in 1974 the question of extending reverse preferences to the new EEC members (notably Britain) will be considered. Secondly, in January 1974 the CEAO replaced UDEAO and from 1 January 1975 the new tax on intra-CEAO trade (TCR) 3/ is intended to replace the existing UDEAO preferences, which remain in force until then.

1/ Ivory Coast, Senegal, Mauritania, Mali, Upper Volta, Niger, and Dahomey.

2/ I.e. France, West Germany, Italy, Belgium, Holland and Luxembourg.

3/ Taxe de Cooperation Regionale or Regional Cooperation Tax.

The tariff is complicated in practice by the use of "valeur mercuriales" or fixed values on which duties are based. Although originally introduced as a means of dealing with underinvoicing and supposed cases of dumping, "valeurs mercuriales" have been used quite explicitly as a protective device, particularly for the clothing and textile industry. When duties are applied to a valeur mercuriale which is higher than the c.i.f. price of an import the rate of duty on the c.i.f. price is increased, preferential margins are widened, and the application of the TVA (which is normally neutral) has a net protective effect.

Price control is exercised under a 1961 law and a general price freeze in force since 1969. In practice most principal manufacturing firms must submit cost dissections and other accounting data to the price control branch of the Finance Ministry if they wish to increase their prices.

Data

(a) Input-Output. We are working with 1971 data, which were the latest available when the research commenced last year.

The basic source is the detailed 1971 national accounts. These are organised in an input-output framework with 27 major sectors. Of these 4 are agriculture, one mining and 15 manufacturing, and the rest construction, transport, commerce, services etc. Leaving aside electricity and water supply, for the 15 manufacturing subsectors input-output are available for 57 subsectors.

Excluding bakeries and artisans, there are only about 200 modern sector firms, of which the largest 100 or so account for over 90 percent of employment and value added. With so few firms there is often only one or two firms per subsector e.g. one flour mill, one palm oil refinery, one aluminium products plant etc. For this reason we work with the actual questionnaires as well as the national accounts. These provide quite good descriptions of inputs and outputs as well as other information not given in the national accounts.

The national accounts data is supplemented by information from annual reports on each priority firm and on some non-priority firms prepared by the Planning Ministry, as well as any other information we can find.

So far it has not been necessary to approach any firms for input-output data directly, but we have now accumulated a number of informational gaps which may need to be filled by direct enquiries.

(b) Tariffs and export taxes. The tariff schedule is fairly simple and often nominal duties on similar products are the same, so that while inevitably tedious and time consuming, the attribution of duties to inputs and outputs is relatively straightforward. Estimates for priority firms are greatly simplified by the fact that they are exempt from practically all import taxes as well as the TVA. Import duties are fortunately nearly all ad valoreum; however, price data is needed arbitrary "values for duty" are used as the tariff base.

(c) Price comparisons. Quotas or other quantitative measures protect sales of manufacturing firms equivalent to about one-quarter of domestic sales. In all these cases price comparisons are needed. As regards other products we have the rough rule of thumb proposed by Balassa viz to make price comparisons in all cases when competitive imports exceed 10 percent of domestic sales. Despite price controls it seems reasonable to suppose that competitive imports would not occur unless the domestic price is close to the c.i.f. price plus the tariff.

The main data source for price comparisons is the price control branch of the Finance Ministry. This work is being done by the local research institute (CIRES). We have found that it is practically essential to have a researcher on the spot for this work, since many of the comparisons needed only became apparent during detailed work on each firm or sector.

As well as the price control branch, other sources of price data include the import/export statistics (mostly per kilo) and the national accounts questionnaires.

There are obvious economies in pooling price information and while preserving confidentiality we are pooling Ivory Coast and Senegal data on c.i.f. and f.o.b. prices and plan to do the same for Ghana and Mali.

If the information can be obtained without excessive difficulty we have tried to obtain price series for a number of years rather than for a single year only. However the actual comparison used is 1971 or for dates as close as possible to this. Fortunately most prices - both domestic and border - were relatively stable over the period 1970-72.

(d) Other cost and financial data. The basic data sources described above contain fairly complete data on employment, wages, amortisation, royalties, profits and profit taxes, and limited information on capacity utilisation (number of shifts worked). We plan to use this information in later analysis (discussed below).

TABLE I

IVORY COAST: SOME EXAMPLES OF EFFECTIVE PROTECTION TO DOMESTIC SALES OF MANUFACTURING FIRMS-PRELIMINARY ESTIMATES FOR 1971

Year Production Commenced	Priority (P) or non-priority (NP)	Type of protection: quantitative (Q) or tariff (T)	Protection to domestic sales against imports from EEC %: Effective	Protection to domestic sales against imports from EEC %: Nominal	Average Protection on tradeable inputs %	$\frac{VA_W}{VO_W}$ %
1961	P	Q	neg. VA_W	42	0	neg. VA_W
1961	P	Q	neg. VA_W	75	7	neg. VA_W
1963	P	Q	714	31	1	4
1962	NP	Q	327	177	2	53
1964	P	Q	265	75	14	24
1967	P	Q	256	74	0	28
1961	P	T	220	30	1	13
1964	P	Q	208	30	- 3	15
1967	P	Q	177	61	0	34
1967	P	T	138	36	4	24
1954,1963	P	T	117	30	0	26
1971	P	Q	117	45	0	38
1969	P	T	110	38	7	30
1964	P	T	100	15	3	13
1961	P	T	97	13	2	12
1964	P	T	88	15	3	12
Sub-total: EPR > 75%			189			
1964	P	T	71	20	- 3	29
1921	P	T,Q	68	34	3	48
1964	NP	T	68	44	27	49
1971	P	T	64	20	0	30
1970	P	T	57	20	0	34
1965	P	T,Q	57	25	1	42
1971	NP	T	53	55	26	73
1962	NP	T	53	30	3	54

TABLE I (Cont'd)

Year Production Commenced	Priority (P) or non-priority (NP)	Type of protection: quantitative (Q) or tariff (T)	Protection to domestic sales against imports from EEC % Effective	Nominal	Average protection on tradeable inputs %	VAw/VOw %
1961-70	2 P 3 NP	T	51	30	8	43
1966	NP	T	48	30	12	50
1961	NP	T	44	37	25	59
1945	P	T	41	27	4	60
1965	P	Q	40	8	1	17
1964	P	T	40	36	33	39
1964	P	Q	40	25	2	58
1960	P	T, Q	39	14	0	34
1971	NP	T	38	22	1	56
1967	P	Q	33	8	0	23
1954-61	NP	T	29	28	28	45
1959-63	NP	T	26	15	12	22
1971,1969	NP	T	25	25	24	33
Sub-total:	EPR 25-74%		53			
1947	NP	T	20	20	18	80
1956	NP	T	13	25	30	61
1962	NP	T	9	16	31	68
1961-3	NP	T	4	10	12	40
1963	NP	T	0	0	0	97
Various	NP	T	- 5	10	27	59
1960	NP	T	- 6	3	15	59
1968	NP	T	-18	17	34	34
1961	NP	T	-22	0	14	42
Sub-total:	EPR < 25%		- 3			
TOTAL			57 *			

* Excluding bakeries = 82%

Symbols

VAd = Value added in domestic prices

VAw = Value added in world (border) prices

VOw = Value of output in world (border) prices

T = Tariff protection

Q = Quantitative protection

TABLE II

Provisional estimates of effective protection

and subsidies to the textile and clothing sector

	% Weighted Average Nominal Protection EEC		Effective Rate of Protection (Corden) against EEC per cent								
	Outputs	Inputs	Domestic Production	Export Production	Average	Without Priority Agreement	Shadow Wage	Tax On Capital Equipment	Normal Profit	Fuel Tax	Profit Tax
Spinning, weaving, dyeing and printing	27	5	86	- 7	67	20	57	59	55	62	68
Cloth articles (except clothing)	28	27	29	0.0	28	28	19	27	n.a.	27	n.a.
Knitted goods	29	0	117	0.0	112	37	89	105	125	109	113
Sacks, string and rope	53	0	123	0	115	103	99	108	97	113	121
Clothing	24	11	51	0	41	19	30	38	44	41	41
Artisan sector (textiles and clothing)	39	32	42	-	42	42	42	42	42	42	n.a.
Textile products not otherwise classified	9	0	64	0	31	- 11	23	15	106	30	31
Total	31	9	67	- 6	58	33	52	54	53	56	59

Some preliminary estimates - Table I

The bulk of the data collection task for the Ivory Coast is now finished but the results still need to be analysed. However some limited analysis for a group of firms has been undertaken and is presented in Tables I and II

In Table I effective protection to the domestic sales of 58 firms is ranked in descending order. In interpreting the Table the following may be noted:

Coverage: about 45 percent of employment in manufacturing in 1971 (excluding public utilities, mining and the oil refinery). Wood processing and processed agricultural products (pineapples, coffee, cocoa, seafood) excluded.

Confidentiality: firm names and activities not shown. Most estimates relate to one firm only.

Protection is against EEC: unless a price comparison was made, this has been assumed equal to the tariff on EEC imports. In two cases (jute and
and estimate is
sisal bags for coffee/cocoa) there was no EEC source and the protection/based on a price comparison with non-EEC prices (jute bags from Calcutta).

Protection refers only to the protective effects of tariffs, quotas export taxes, fuel taxes, and a direct subsidy in one case. Indirect incentives (tax holidays, subsidised credit etc.) are not allowed for.

The EPR concept used is the Corden coefficient i.e. value added incorporated in non-tradeable inputs is included in the numerator of the EPR formula. Tariffs and fuel taxes on tradeable inputs into non-tradeables therefore affect the EPR estimates, as well as the average protection to tradeables. Depreciation is included in value added and so no account is taken of the effect of import duties on machinery and equipment and tradeable inputs into construction. We have detailed depreciation data and this will be analysed at a later stage.

The three categories of firms account for value added and employment of Africans in the following way:

EPR %		% of total		
	Average	VAd	VAw	Employment of Africans
75	189	36	19	23
25–74	53	40	41	45
25	- 3	24	40	32
Total	57	100	100	100

VAd = Value added in domestic prices

VAw = Value added in world prices

The following is also of some interest:

	Average EPR %	VAd Million CFAF	Employment of Africans
27 priority firms	103	10192	9226
31 non-priority firms (excluding bakeries)	30	2561	2026
Non priority firms (including bakeries)	9	5184	6326

Some preliminary estimates - Table II

These estimates are made on the same basis as Table I except that exports (about 15 percent of total sales - for the sector) have been provisionally assumed to have zero protection i.e. to have been exported at the border price of EEC imports. Since nearly all exports were to neighboring countries under preferential arrangements this needs to be adjusted in later analysis.

The average EPR is the weighted EPR on the above assumption. The subsequent columns show the adjustment to this average EPR on various assumptions.

The EPR without priority agreement is an estimate of what the average EPR would have been if priority firms had not been exempt from the (EEC) tariff on their inputs. It is therefore a partial measure of the extra incentive given by the Investment Code.

In the next column 25 percent of the wages actually paid to the African work firms is arbitrarily deducted from VAd in the EPR formula.

The next column tests the effect of the hypothetical imposition of a tax on capital equivalent to one third of ~~of~~ the depreciation change.

The next column adjusts the average EPR for excess profits and losses. "Normal" profit is arbitrarily defined as the average for manufacturing in 1971 i.e. 15 percent before tax on equity. The difference between this and actual profits is simply added or deducted from domestic value added.

The next column allows for the disincentive effects of fuel taxes. These proved to be very small.

The final column adjusts for the difference between the average rate and the actual company tax paid.

This also turns out to be quantitatively of minor importance.

Further work and analysis

In order to use estimates such as these as indicators of comparative advantage the principal requirements are:

(i) Estimation of nominal and effective protection taking account of tariff and other preferences.

(ii) Tests for various assumptions about shadow prices, in particular African labor, expatriate labor, and capital.

(iii) Analysis of particular cases to allow for excess capacity, monopoly profits, and "x-efficiency."

(iv) Analysis of the effects of protection on the costs of machinery and equipment and traded components of construction.

(v) Identification and treatment of non-traded tradeables for a domestic resource cost measure.

The importance of correction for above and below normal profits and excess capacity may be illustrated by the following estimates for three firms producing practically identical prodicts.

Firm	EPR % Average	EPR % Required for normal profit	Capacity utilisation
X_1	109	65	1 shift - practically full capacity.
X_2	24	13	2 - 3 shifts
X_3	57	115	1 shift "80% capacity"

In another case a firm with an EPR coefficient of 105 percent earned a tax exempt profit of 76 percent on equity. On these figures its protection could have been reduced to 22 percent effective while still enabling it to earn 15 percent on equity.

Garry Pursell
April 25, 1974

O.P. Research
(Traffic Restr. Study)

April 25, 1974

Mr. Bruno Wildermuth
Mass Transit Study
10 Pender Road
Singapore

Dear Bruno:

Here are my notes from the workshop and the latest study proposal, which we have submitted to our Research Committee for funding. We are optimistic about getting it, but won't know officially for a month or so. Meanwhile we want to go ahead as fast as possible with your end of the preparatory work before you get absorbed in the second phase of the Mass Transit Study.

Since we did not get funds from the government of Singapore for the previous proposal, which was slanted toward the short run and operational problems, we have now added everything we think is needed to make it a good research project. You will see that it is much more comprehensive than before. The first impact of this new viewpoint will be on your survey design. Peter Watson has agreed to come to work with us for a year, and after hearing you and Peter discuss the subject during the workshop, we think it would be worthwhile to let him try to see that the surveys are designed to yield the data he needs for his kind of model in addition to what you otherwise need. For this, I increased the budget estimate by 50% per round. I also call for three rounds of surveys now instead of only two. I would like to review my estimates with you a little later on, but for the present let's just focus on the survey design and model modifications.

We would like your advice on how to manage the surveys and other data collection. By the time it comes to executing the surveys, you and Pok's group will probably be fully occupied with Phase II of the Mass Transit Study, and Lim will presumably be busy on other problems. It has been suggested that we could contract with the Applied Research Corporation to manage the interviewing job and pre-specified data processing and perhaps also to gather data that we specify in addition to the survey data. Does that make sense to you? Do you know their capabilities? Are there any alternatives?

Clell is going to be in Indonesia from May 20 to 28, and has asked for a meeting with Cheng Tong Fatt in Singapore on the 29th or 30th. If this is agreed to, I will also come out there at that time. Besides meeting Cheng and, of course, Lim, we will want to talk with you about what you have done, what you plan to do, and about the plan of the study. Between now and then, please keep us informed of your progress and/or problems and, whenever relevant, communicate directly with Watson at Northwestern (with copies to me, please). Watson will be moving to Washington August first, but in the meantime we expect to have him as a consultant for a day or two now and then. We will want the questionnaire agreed upon between you and Peter, and it will also be reviewed by one or more survey experts here in the Bank, so please circulate a preliminary draft as early as possible so we can all start looking at it. The same applies to the non-survey measurements.

That's all I can think of for now. I hope we are off dead center and beginning to roll! Looking forward to hearing from you.

Sincerely,

Edward P. Holland
Transport Research Division
Transportation & Urban Projects Department

Enclosures

EPH
EPHolland:mcp

cc. Mr. Harral
Mr. Venkateswaran
Mr. P. Watson (NWU)
Mr. Marshall Rich

OP-RESEARCH

April 25, 1974

Mr. Robert H. Best
Branch Sales Manager
Marketing Division
Control Data Corporation
6003 Executive Boulevard
Rockville, Maryland 20852

Dear Mr. Best:

Referring to your meeting with Messrs. Paul Smith and D. C. Rao, Wednesday April 24, 1974, I am attaching a list of External Research projects which have an authorized computer budget for this fiscal year (July 1, 1973 through June 30, 1974).

One of my tasks as a Research Assistant is to closely monitor computer expenditures on External Research projects. In the past it has been rather difficult to keep the records up to date due to a month's lag in receiving bills for Remote Batch and Timesharing. It is my understanding that you will notify me every time there is a computer charge against one of the attached research projects.

I am certain that, with the implementation of this new system, we will be able to have more accurate and reliable data.

To contact me, please call 477-6022. I look forward to hearing from you.

Sincerely yours,

Mona Hazzah

Mona Hazzah
Research Assistant
Office of the Vice President
Development Policy

Enc.

MH/wg

Attachment

Research Project Number	User Number
670-203	S3670
670-208	S3664
670-223	S3673
670-224	S3666
670-226	S3676
670-227	S3668
670-269	S3698
670-273	S3689
670-286	S3692
670-287	S3693
670-293	S3694

OP-RESEARCH (URBAN LAND USE)

Mr. Ricardo Paredes (Consultant) April 24, 1974

John C. English, Acting Division Chief, ECDRB

Mission in Colombia: Terms of Reference

1. On or about May 6, 1974 you will participate with Messrs. Grimes and Doebele and Ms. Oxman in research on urban land policies in Bogota. Your assignment will be to (1) conduct interviews at Planeacion Distrital and the Treasurer's Office and other bureaus of the municipal government; (2) assemble and collate samples of land transfers and plot characteristics from the Recorder's Office and from the Lonja de Propiedad Raiz; (3) assist Mr. Doebele, particularly at the Valorization Office within IDU; and (4) assist Mr. Grimes and Ms. Oxman as needed. The term of your appointment will be ten days, with the option to extend up to an additional five days if necessary.

JCE:ap

Cc. and Cleared with: Ms. Hughes MM

cc.: Mr. Keare

OP-RESEARCH (URBAN LAND USE)

Ms. Eleanor Oxman, ECDRB April 24, 1974

John C. English, Acting Division Chief, ECDRB

Urban Land Research Mission: Terms of Reference

1. On May 5th. you will proceed to Bogota, Colombia where you will assist in data collection and analysis of RPO298: "Urban Land Use Policies: Taxation and Control". You will work under the general supervision of Mr. Orville Grimes. Fieldwork in Bogota is scheduled to last approximately 2 weeks.

2. The pretesting of the questionnaire on housing, related to ongoing Division work on the Housing Policy Paper, will also be your responsibility during your mission in Bogota.

3. You will return to Washington on May 18. Upon your return you will submit a back to office report relating the findings of your mission.

JE:ap

Cc. and Cleared with: Ms. Hughes MH

cc.: Mr. Keare

OP-RESEARCH
(URBAN LAND POLICIES)

Mr. William A. Doebele April 24, 1974

John C. English, Acting Division Chief, ECDRB

Mission in Colombia: Terms of Reference

1. You will be joined in Bogota on May 5, 1974 by Mr. Orville Grimes and Ms. Eleanor Oxman (see separate terms of reference). Mr. Grimes will coordinate your work on the second stage of field research on urban land policies, during which you will focus in particular on the role of government charges ("impuestos de valorizacion") in urban land policy and on the effects of land policies on the urban poor. You and Mr. Grimes will be assisted in this endeavor by Ms. Oxman and by Sr. Ricardo Paredes (Universidad de los Andes). The mission will last approximately two weeks.

2. Upon your return to London you will prepare a report describing your findings and recommendations. This report is to be delivered to Mr. Grimes by June 15, 1974.

JCE:ap

Cc. and Cleared with: Ms. Hughes MM

cc.: Mr. Keare

OP - RESEARCH (URBAN LAND USE)

Mr. Orville F. Grimes, Jr., ECDRB April 24, 1974

John C. English, Acting Division Chief, ECDRB

Mission to Colombia: Terms of Reference

1. You will proceed to Bogota, Colombia on May 5, 1974 where you will coordinate the second stage of the Division's field research on urban land policies. In this effort, you and Professor William Doebele (Consultant) will be assisted by Ms. Eleanor Oxman (Urban and Regional Economics Division, ECD) and Sr. Ricardo Paredes (Universidad de los Andes). The purpose of your mission will be to investigate the evolution of urban land markets and public policy in Bogota, including urban land taxation, development charges ("impuestos de valorizacion") and the effects of land policies on the urban poor.

2. In addition, you will pretest the Field Data List/Questionnaire on housing for the Division's work on the Housing Policy Paper. You will be assisted in this endeavor by Ms. Oxman. You are authorized to hire one or two additional research assistants, as needed, to collect and tabulate information on housing demand and supply.

3. You will return to Washington on or about May 18, 1974. You will prepare a back to office report summarizing the findings of the land research portion of the mission, and report to Messrs. Douglas Keare and John Carson on results of pretesting the housing questionnaire.

JCE:ap

Cc. and Cleared with: Ms. Hughes MM

cc.: Mr. Keare

D.P. Research

le 24 avril 1974

Son Excellence
Monsieur Ousmane Seck
Ministre du Plan et de la
Coopération
Dakar, Sénégal

Monsieur le Ministre,

J'ai l'honneur de porter à votre connaissance que le professeur Bela Balassa, Conseiller à la Banque Mondiale, procède actuellement à l'étude de la politique industrielle dans le cadre d'une intégration économique de l'Afrique de l'Ouest. Le but du projet est d'examiner les perspectives dans lesquelles s'inscrivent la croissance économique et le développement industriel de la région de l'Afrique de l'Ouest au travers des politiques économiques nationales, notamment du point de vue de l'intégration économique régionale. Il a été envisagé d'axer le projet sur quatre pays: le Sénégal, la Côte d'Ivoire, le Ghana et le Mali. Dans le cadre de cette étude, et sous réserve de votre agrément, le professeur Balassa, accompagné de ses collaborateurs, Monsieur Pursell et Mademoiselle Konings, se propose de se rendre au Sénégal du 18 au 25 mai prochain.

Bien que les objectifs de la mission dirigée par M. Balassa aient été déjà discutés avec vos services, j'aimerais brièvement vous indiquer le contenu de cette étude qui comporterait l'examen des incitations économiques auxquelles ces pays ont recours, à savoir: les droits de douane, les contingentements, les crédits préférentiels, ainsi que toutes autres formes de subventions. La mission s'efforcerait de les quantifier et d'en évaluer les effets conjugués sur les secteurs de l'activité économique. Les données ainsi obtenues seront ensuite utilisées pour évaluer le coût économique du régime des incitations et calculer le rapport coûts-avantages des investissements étrangers dans les quatre pays en question.

Il conviendrait, par ailleurs, de recueillir les renseignements concernant les incitations économiques par des données qui seront obtenues sur les grandes entreprises et les principaux secteurs économiques afin de déterminer, dans chaque secteur, les coûts comparés pour les quatre pays et par rapport aux pays étrangers. Les données obtenues serviraient à déterminer les perspectives de croissance qui s'offrent à chaque pays en fonction des diverses politiques économiques mises en oeuvre. Les différentes options à envisager porteraient notamment sur la poursuite de l'action menée par chaque pays dans les domaines suivants: remplacement des importations, intensification des échanges à l'intérieur de la région et expansion des exportations vers les pays extérieurs à la région. Les recommandations qu'il y aurait lieu de formuler intéresseraient l'ensemble des mesures que pourrait prendre chaque pays et porteraient essentiellement sur l'incidence que les politiques appliquées peuvent avoir sur la croissance économique, la situation de l'emploi et de la distribution des revenus tant dans le pays intéressé que dans les autres pays de la région.

Par ailleurs, nous souhaiterons aussi saisir l'occasion du passage de l'équipe de Monsieur le professeur Balassa à Dakar pour discuter avec les autorités compétentes des conclusions du rapport sur l'industrie sénégalaise de Monsieur Decaux. Nous vous ferons parvenir un exemplaire de cette étude avant la venue de la mission. Dans la mesure où ces propositions vous agréent, Monsieur Decaux se joindrait à la mission dans le courant de la semaine du 20 - 25 mai.

Veuillez agréer, Monsieur le Ministre, l'assurance de ma très haute considération.

Klaus Huber, Chef de
la Division des Programmes
Région Afrique de l'Ouest

cc.: Messieurs Kochman
Balassa

RRabeharisoa:mtf
File: SENEGAL - Industrial Mission

Summary Translation: Informing the Government of Mr. Balassa's visit to Senegal to prepare a survey on economic integration and industrial policies in West Africa.

OP-RESEARCH

April 24, 1974

Dr. Roger Revelle
Harvard University
Center for Population Studies
9 Bow Street
Cambridge, Mass. 02138

Dear Roger:

Thank you for your letter of April 5, and for the proposal that the Bank support John Houghton's preliminary one-year study of the effects of possible prolonged drought on the design of water resources systems.

I am sorry to have to report that our water resources experts were unwilling to support this proposal before the Bank Research Committee. Their major objection was that a study of sufficient magnitude to provide an important input into Bank studies would have to be carried out by someone with more practical experience in the design of agricultural and irrigation systems than Mr. Houghton has. For this reason, although the project aroused some interest on the operational side of the Bank, I do not feel I could have supported it effectively before the Research Committee.

With best regards,

Sincerely yours,

CW

Charles Weiss
Science and Technology Adviser

CWeiss/rc

O.P. Research
(Traffic restraint
Singapore)

April 24, 1974

Mr. Cheng Tong Fatt
Permanent Secretary
Ministry of National Development
Singapore

Dear Mr. Cheng:

At the suggestion of Mr. Hochstadt, who visited us yesterday, I am writing to inform you of our interest in undertaking a study of traffic restraint in Singapore as part of the IBRD research program and to request your approval for doing so.

As you know, there have been several discussions of such a study between Edward Holland of our Research Division and Lim Leong Geok, among others. Originally, the study was thought of as an adjunct to Phase II of the Mass Transit Study, with the focus on 1982 and later years. More recently, when we learned of the plans being made under the direction of the Road Transport Action Committee, we redefined the study so that it could serve as a backstop for dealing with certain problems that might be generated by the licensing scheme (such as new congestion points outside of the restricted zone). At the same time we recognized the planned licensing scheme as an unusual opportunity to make some quantitative observations on the adjustments that people would make in their travel habits, and planned to take advantage of that opportunity for research. A proposal combining these operational and research objectives was drafted by Edward Holland of our Research Division and discussed with Lim Leong Geok, who brought it to the attention of the Road Transport Action Committee. In March, Mr. Lim cabled Mr. Jaycox, Director of our Department, as follows (in part):

> "Road Transport Action Committee expressed interest in proposed study as outlined by E. Holland but regrets no allocation of funds for study ...."

During his visit to Singapore shortly thereafter, Mr. Venkateswaran discussed the matter with Mr. Lim and came to understand the reasons for the Committee's reluctance to provide funds or manpower for the study. It was understood further, however, that there would be no objection to the study being done if it were managed as an IBRD research project and paid for by the Bank. As a result, we decided to apply for a grant of funds from the IBRD research budget to pay for the study. To justify an allocation of research funds, we again revised the plan to encompass some research goals which, though important, we had omitted from the former, more operationally oriented proposal. This was done entirely by adding to the former proposal withouth diminishing any of the elements aimed at guidance and problem-solving for the immediate restraint scheme. Thus we have considerably enlarged the scope of the proposed study. The new Research Proposal, including Draft Terms of Reference, is enclosed.

In order to be able to carry out the proposed study, we must, of course, have the consent of the Government of Singapore and cooperation in the form of provision of information and data. Further, we certainly hope to have opportunities to profit from discussions with you and members of the Road Transport Action Committee during the course of the research activities. For these reasons, I now ask your approval and assurance of the cooperation that will be needed if the work is to be useful both for Singapore's immediate problems and for longer-run research objectives. We fully understand your staff constraints, and do not expect to make requests that would divert any significant effort from their primary duties.

We are confident of the IBRD Research Committee's approval of this proposal, although the official action may not be forthcoming for another month or two. It is important that we start right away, however, on the preparatory stages of this work, especially because Bruno Wildermuth of Wilbur Smith Associates will be a key man in the design of the study details and improvements to the models. Wildermuth's contribution to these elements should be carried as far along as possible before his time is taken up with the second phase of the Mass Transit Study. Therefore, we are contracting for his services during the next two to three months to work on those critical aspects of the preparations. I hope you will have no objections to this activity on his part, which would include occasionally conferring with Lim Leong Geok and others.

Mr. Holland and I would like very much to meet you near the end of May to discuss our plans for the study. I will be in Indonesia May 22-28, so that a meeting in Singapore would be convenient for us about May 29-20, if convenient for you. Meanwhile, it would be a great help to our planning if you would give us an early indication of your approval of our conducting the study.

Thank you.

Sincerely yours,

Clell G. Harral
Chief, Transport Research Division
Transportation and Urban Projects Department

EPH

CGHarral/EPHolland:gbm
cc: Mr. Lim Leong Geok — MR. H. Hochstadt - MR. Ngiam Tong Dow
cleared: Mr. Venkateswaran
cc: Mr. Helmers

O.P. Research

Mr. F. Stephen O'Brien April 23, 1974

Howard E. Tolley, Division Chief, East African Country Programs IB HET

ETHIOPIA: Food Security Mission - Terms of Reference

1. You should arrive in Addis Ababa, Ethiopia, on or about April 25 to participate as general economist in the Joint FAO/IBRD Ethiopian Food Security Mission. The duration of the mission should be approximately four weeks.

2. While in Ethiopia you will contribute to the work of the mission as directed by the Mission Leader, Mr. S.M. Taylor, Senior Economist, Policy Analysis Division, FAO.

3. You will return to Washington on or about May 20 in order to prepare your sections of the Missions' preliminary report and to participate in the Working Level Review and Director's Review of the Ethiopian 1974 Country Program Paper. If it is necessary for you to rejoin the mission in Rome for discussion and coordination of the final report, this can be arranged in early June.

cc: Messrs Lejeune (o/r)
Please
Yudelman
Veraart

FSO'Brien/dh

INCOMING CABLE

O.P. Research
(289)

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REGARDS ROGERS

D.P. Research (Traffic Restr study)

MR. BRUNO WILDERMUTH
MASS TRANSIT STUDY
10 PENDER ROAD
SINGAPORE

APRIL 23, 1974

LT

SINGAPORE

CONTRACT BEING SENT TO WSA TODAY FOR YOUR SERVICES PREPARING FOR RESTRAINT STUDY STOP FIRST PRIORITY IS QUESTIONNAIRE AND PLANS FOR RELATED OBSERVATIONS STOP FIRST DRAFT OF THESE TO BE REVIEWED BY WATSON AND OTHERS AS SOON AS POSSIBLE STOP SECOND PRIORITY IS MODIFYING MODELS FOR PRICE RESPONSES STOP AIM TO ACCOMPLISH AS MUCH AS POSSIBLE BEFORE MTS PHASE TWO BEGINS STOP DISCUSSED PROPOSAL WITH HOCHSTADT HERE YESTERDAY STOP AT HIS SUGGESTION WE ARE WRITING CHENG TONG FATT REQUESTING GOVERNMENT APPROVAL AND COOPERATION STOP HOLLAND AND HARRAL PROPOSE VISIT SINGAPORE END OF MAY STOP NEW DRAFT TERMS OF REFERENCE AIRMAILED TODAY

HARRAL

C.G. HARRAL

C.G. Harral

E.P. Holland:gbm

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

OP Research (Traffic Rest)

TO: Mr. Clell G. Harral

DATE: Drafted February 25
Finalized April 22, 1974

FROM: Edward P. Holland EPH

SUBJECT: Visits and Interviews in Australia.

I arrived in Australia on February 7 and departed on February 15. During that time I held discussions with roughly a dozen people about the traffic restraint study planned for Singapore, the Transport Research Division's research program and their own various research activities. I sought possible consultants either to assist in the restraint study or for other possible not-yet defined assignments. With a few appropriate people I discussed the prospects of recruitment for the Bank's staff. With Professor Kolsen at Queensland University I continued a dialogue that has been going on by correspondence about his working with the Bank during a "study leave" period. With people in the Commonwealth Bureau of Roads, I discussed several specific ways that we might help each other in our research work. They also introduced me to two potential consultants for the traffic restraint study or other urban studies.

In Canberra my first visit was with Dr. Max Neutze, Chief of the Urban Research Unit, Research School of Social Sciences, Australian National University, to whom we had previously mailed material on the Singapore Traffic Restraint Study and my HRB paper on traffic restraint. He explained that his interests had departed from transportation analysis in recent years and now centered on land use planning, especially the sociological aspects thereof. He expressed interest in knowing more about the Bank's activities in urban planning, on which I tried to inform him. He might at some time be able to participate as a short-term consultant on an urban project (not specifically transportation), but is rather heavily committed at the present time.

My second visit in Canberra was with Mr. Ken Thompson, Assistant Director, Transport Technology Branch, Bureau of Transport Economics, Department of Transport, whom I looked up at the suggestion of Marshall Rich (Wilbur Smith, Singapore). I told him about the Singapore studies (mass transit and traffic restraint) and about our Division's research program, and he told me about the research program of his bureau. We found we had many interests in common and agreed that it would be useful to exchange information from time to time. We also discussed possible consultants for the traffic restraint study.

Mr. Thompson said they were doing lots of modeling work, and gave me a copy of a paper he had presented on the subject (The Use of Economic Evaluation Models in Australian Transport Planning) at an international conference in Bruges, in 1973. He said they were looking for more appropriate modeling techniques, simpler models, and so forth. They have just commissioned a consultant to review existing modeling techniques and suggest what lines should be followed in new model development work. Thompson also said they were thinking about a study of traffic restraints for Sydney and that the Australian association, NAASRA, which corresponds to AASHO in the U.S., were starting a study of road standards and vehicle dimensions and weights for a combined optimization. I have asked him to send us details of the traffic restraint study and of their review of modeling techniques.

After I had explained the situation in Singapore, and the ideas we were formulating for before-and-after surveys, Mr. Thompson "thought out loud" about possible consultants for the survey design as follows:

Jeff Lack (W. D. Scott Company) is a capable modeler, economist, and engineer, but not specialized in the field of urban transportation.

Ron Skeates (see below) good on models but probably not expert on statistical design.

Trelore good on statistics but not specifically transport models.

Then he said that no one in Australia really fitted the requirements for designing the kind of surveys we would need, since the task called for an unusual combination of knowledge of urban transportation modeling and of statistics, to which it would be useful also to add economics. He felt that Bruno Wildermuth was one of the best qualified people, although he might need some support on economics. The one other person he thought would meet all the requirements was Ramsay Wigan (just leaving the English TRRL, to join the staff of the Greater London Council).

In Melbourne, John Stanley had arranged for me to meet a number of people in the Commonwealth Bureau of Roads. A partial organization chart, giving names of those I met, is on the next page.

A discussion meeting was attended by those whose names appear on the next page, except for Messrs. Loxton and Delaney, plus two other CBR staff members named Atkins and Aid whose positions on the chart I did not learn, plus the head of an urban research consulting firm, John Paterson, and a student from Monash University, Ken Ogden. (Joe Delaney was away the day of the meeting.) At this meeting I told them about the models that had been used for the Singapore Mass Transit Study, about the earlier ideas on the traffic restraint study, and about the present situation in Singapore which has led to our belief that the design of before-and-after surveys was the matter of first priority. There was an interesting discussion of the technical problems of defining a sample on a statistically sound basis, and of the survey itself, as well as the relation of the survey to simulation models, and other related aspects of the traffic restraint study as now proposed.

Partial Organization Chart

- Commonwealth Bureau of Roads
  Chairman
  Mr. Harold Loxton
  - Finance Division
  - Engineering Division
  - Transport Planning Division
    Chief
    Joe Delaney
    - Deputy Chief Evaluation
      Tom Hogg
      - Environmental Studies
      - Sociology
      - Economics
        John Stanley
      - Econometrics
        David Hensher (consultant)
    - Deputy Chief Investigation
      Nelson English
  - Administrative Division

Tom Hogg and some of the others filled me in on the current work of the Evaluation Section and on some studies that had been done for them by consultants, including John Paterson and David Hensher, who were present. Some of this work is very relevant to our own interests, and I brought back a number of reports that will be helpful in our thinking, although some of them are restricted for the present time*. One particularly interesting item was a survey of commuters from a suburb of Sydney before and after a major increase in fares on the commuter rail line (4). The primary work on the last mentioned study was done by Hensher, who at that time was working as a staff member of a firm headed by Paterson. (John Paterson Urban Systems, Pty. Ltd.). Hensher is now working as an individual consultant with a project for the Commonwealth Bureau of Roads that will occupy him full time until the end of May.

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* See list, Annex 1.

After talking with a number of people about both men as possible consultants, my judgement is that Hensher would be a good man for transport modeling and for survey design as well as economic analysis. His one possible limitation is that he seems to think and act very fast without always checking for errors. Thus he might need to be supervised or to work in partnership with someone else who could question him as he went along. He was very highly recommended by several of the other people I talked with, and probably could do very valuable work for us under suitable conditions. I would suggest that if Wildermuth, Pok, and Lim design the Singapore restraint study surveys, it might be good insurance to have Hensher review them critically before they are carried out.

Paterson did his Ph.D. work under Max Neutze. He impressed me as very able, intelligent, and apparently skilled in survey design and analysis. I do not think he has much background in transportation systems modeling, being more of an urban planning expert. However, he raised some pertinent questions about the before-and-after surveys which showed that he has at least some knowledge of transportation and travellers' behavior. While he would probably not be the appropriate person for the original work on model modification and survey design, he might be considered as a possible reviewer of surveys designed by others.

John Stanley is not presently available for consulting (except possibly very short-term) inasmuch as he has recently returned from study leave, has much to catch up on, and has a heavy workload. Moreover, he is not particularly experienced in the urban side of transportation nor in survey design. Thus I do not think he would be ideal for the traffic restraint study. However, he is bright, energetic, and well versed in transport economics and modeling. He is eager to keep in touch with us and to exchange information on our respective developments in methods of analysis and evaluation. He asked about our possible interest in exchange of staff, and I said that we would be interested in considering the possibility either when they had a specific need for someone whom we might supply for a limited period. Such exchanges, I think, could help relate our research programs to each other meaningfully. John also said he was to be eligible for a long period of leave (on the basis of his service) about two years hence, and would like to spend at least part of it at the World Bank. I think the Bank could benefit by pursuing this idea at an appropriate time.

Also at the Commonwealth Bureau of Roads, I had a short talk with Messrs. Steve Carapetis (Deputy Chief, Engineering Division) and John Miller, who are representing the Bureau on a committee concerned with a study of maintenance policy, sponsored by NAASRA (equivalent to the U.S. AASHO). They asked for information on our Highway Design Study, especially that part dealing with empirical observations on the effects of road maintenance on vehicle operating costs, and I undertook to get the information to them. I believe it might be fruitful to keep in touch with them as their study progresses in Australia.

In Brisbane, I had a long discussion with Professor Helmut ("Ted") Kolsen, with whom the Bank has corresponded in the past about the possibility of his working with us for a limited time. Professor Kolsen is now going to be available between June and December of this year. He took pains to make it clear that he was not interested in quick project-appraisal assignments or making superficial policy pronouncements. He would like very much to do some serious theoretical research on a basis similar to that whereby Alan Walters and Conrad Oort produced their Occasional Papers. He is particularly interested in analyzing road pricing through a multi-product approach, which he says would be somewhat like the latest approaches in public utility pricing and would be "the next step after Walters", whose analysis treated road use as a homogenous product.

He argued very persuasively that the services of roads or railways to different types of users at different times of day should be treated as a set of different products, produced jointly, and that the appropriate pricing principles could (and should) be derived from the works of classical economists including Dupuit, Marshall, Pigou, and Taussig. He said that more recent analysts, like Locklin and Harbeson, in discussing railroad freight tariffs, had overlooked these principles and had thereby gone astray. He said that Turvey had done the right sort of thing for public utilities, and it was time for someone to do a similar theoretical treatment for transport. He sounded as though he could do a good job of it, and that is what he would like to do under the Bank's sponsorship.

Professor Kolsen gave me copies of a number of his publications. They are listed in Annex 2.

Ronald Skeates joined Professor Kolsen and me for lunch. He had been the principal transport analyst of the consulting team (from Cooks, Michel and Peacock), working on the previous land use and transport study (the "SCP" study) in Singapore. His opposite number on that study was Lim Leong Geok, and one of his associates was Dick Woodford, now with the Bank. He had also worked at one time for

Wilbur Smith Associates and another time for another consulting firm. After the SCP study he went to the Asia Development Bank, where he was largely responsible for developing the Singapore expressway project. He is an engineer, but knows something of the economics of transportation. His position is chief of the Planning Section in the office of the Coordinator General of the Queensland state government. The Coordinator General's Office is responsible for reviewing and coordinating the programs and budgets of the various departments in the state government and dealing with special interdepartmental problems. I gather that they have considerable power over budget allocations and major projects. Mr. Skeates reports directly to the Deputy Coordinator General.

In response to my questions, he said he might be available for short-term consulting on transport and land-use planning from time to time, but not for periods more than a couple of weeks or so. He and someone else from the Coordinator General's office are planning a tour around the world to learn about operations of planning offices in various countries. They will be in Washington in May, and Skeates will be looking up Woodford and Strombom.

While in Sydney, I talked with Stuart Hicks, a graduate student at the University of New South Wales. He expects to complete his thesis and receive his Ph.D. degree in December 1974. He plans to be in Washington toward the end of March (1974) on a trip to gather material in various countries for his thesis on regulation of truck transport (see outline, Annex 3). He will also be surveying the job market. I gave him the brochure "A Career with the World Bank Group" and explained the Young Professional Program. I also gave him a personal history form, suggesting he fill it out and send it to us with a letter about his coming visit and about his employment interests.

During our conversation, we discussed Kolsen's and Walter's approaches to road pricing. He obviously understood both quite well, agreed with Kolsen that something was needed beyond what Walters had done, but felt that Kolsen might be overenthusiastic about his proposed approach. We also discussed the Singapore traffic restraints and the proposed study thereof. He expressed concern about whether the restraints would apply to trucks (I think the present plan is to include them), and said he felt it would be important to ascertain the effects of commercial traffic and costs, and, therefrom, on downtown business. All in all, I was very favorably impressed with Hicks' knowledge, intelligence, and personality. I think he would be an excellent candidate for the Bank staff.

EPHolland:gbm

cc: Mrs. Stone, Personnel Department

ANNEX 1

REPORTS ACQUIRED FROM COMMONWEALTH BUREAU OF ROADS, MELBOURNE
February 1974

1. Report on Roads in Australia, Commonwealth Bureau of Roads (1973)

2. Hensher, D.A. - Urban and Suburban Passenger Transport Policy Options - Suggestions for Efficiently Altering the Modal Split Working Paper 72/68, Commonwealth Bureau of Roads (October 1973)-- Temporarily Restricted.

3. The Economic, Environmental and Social Effects of Road Improvements-Volume II, Part 3 - The Environmental Effects - Bureau Paper No. 18, Evaluation Branch, Transport Planning Division, Commonwealth Bureau of Roads, Melbourne (August 1973)

4. Elasticity of Demand for Urban Public Transport - C.B.R. Brief No. 71/96, John Paterson Urban Systems (June 1972) -- Confidential

ACQUIRED DIRECTLY FROM AUTHOR

5. Hensher, David - "Review of Studies Leading to Existing Values of Travel Time" - To be published in Highway Research Record on Value of Travel Time (1974)

ANNEX 2

REPRINTS, BOOK, AND OTHER PAPERS RECEIVED FROM PROFESSOR HELMUT (TED) KOLSEN

Kolsen, H.M. - The Economics and Control of Road-Rail Competition, Sydney University Press (1968)

Kolsen, H.M. - "The Victoria Land Transport Inquiry", The Economic Record, (September 1973)

Kolsen, H.M. - "Efficiency and Regulation in Land Transport" Extract from the Economic Record, The Journal of the Economic Society of Australia and New Zealand (December 1968)

Kolsen, H.M. - "Charging for the Use of Congested City Roads", Economic Monograph No. 263, The Economic Society of Australia and New Zealand, New South Wales Branch, (August 1964)

Kolsen, H.M., Docwra, G.B. - "An Analysis of Road Expenditure Policy in Australia" (Excerpts)

THESIS SUMMARY

Stuart K. Hicks,
School of Economics,
University of New South Wales,
KENSINGTON, N.S.W. 2033
Australia.

Thesis topic: "The economics of regulation of the Australian road freight transport industry".

The thesis aims to be a practical application of economic theory to a particular problem of public policy-making - the regulation(1) of the road freight transport industry in Australia. The thesis seeks especially to set the regulation problem in its political and social context and examines the relationship between politics and economic policy.

In Australia, regulation of the transport industry is primarily the responsibility of each State. In the 1930's each State enacted legislation to protect its own State railway system from "uneconomic competition" from motor carriers. Because each State perceived a different solution to the problem, and because some States have changed their policies in more recent years, Australia today possesses a wide array of regulatory systems, from relatively free and simple regulation in South Australia and New South Wales to a complex system of area, route and commodity permits and licences in Victoria.

The thesis surveys these different forms of regulation, their logic and their effects. A Theory of Regulation is derived, suggesting that the establishment of an autonomous or semi-autonomous regulatory body corresponds closely to the establishment of a profit seeking firm: the regulatory body produces a "product", regulation, which it forcibly "sells" to the motor carrier industry. Over time the bureaucracy grows, becoming increasingly involved with day-to-day operations - the "production" of regulation - and less involved with the rationale of its regulatory purpose.

The possible aims of regulation are explored and it is concluded that there does indeed exist an economic role for regulation - the placement of road and rail transport on sufficiently equal footing to enable efficient allocation of the nation's freight transportation resources. The major problem is seen to be the handling of road track costs.

The thesis examines the validity and applicability of the road pricing argument(2) as a solution to the freight transport track cost problem. It explores the joint product world of road transport and develops a road track charge based on the transporter's "willingness to pay", with the requirement that, at a minimum, he meet the unavoidable (or "short run") road maintenance cost of his journey. The practicalities of imposing such a charge are examined. The likely effects of the proposal are studied and its results compared with present regulatory practices. The methodology of a cost benefit analysis of the present system and of the proposed system is suggested.

Finally, the problem of the truck in the urban environment is studied, especially with regard to social costs imposed on the environment. The desirability of increased regulation to assist overcome the problem is examined and the applicability of the proposed charge to social costs is considered.

(1) "Regulation" consists of all institutional and financial constraints imposed upon members of the industry and affecting their choice of destination and route, the types of commodities they are able to carry, and so on. Safety-oriented rules are excluded.

Australian regulation centres around the application of specific taxes and fees and the issue of permits and licences. Rate regulation and capacity restrictions are not applied.

(2) The road pricing argument, it will be noted, is made primarily in relation to an assumed homogeneous vehicle. Little has previously been said of its application to, and effects on, freight transport.

PART ONE

I. Economics, Policy and Politics

Introduction; Aim of thesis; The idea of regulation; Trucks and politics; Economic objectives vs political objectives.

PART TWO: HYPOTHESIS

II. Regulation of Road Freight Transport in Australia

III. The Aims of Regulation

IV. Effects: Desired and Actual

An historical perspective is provided; the attitudes and opinions of policy makers, regulators and truckers are reviewed; How successful has regulation been? Is it seeking to achieve outdated objectives?

V. Critique of Present Regulation

A theory of regulation proposed and applied.

PART THREE: ANTITHESIS

VI. Road Track Costs

The central regulatory problem.

VII. Road Pricing

The applicability of road pricing to trucking; The validity of road pricing.

VIII. Joint Production and Willingness to Pay

The application of an old railway approach to road transport.

IX. Second Best and N^{th} Best

The transport task and the modal split; Investment and cost covering; "Precisely wrong and imprecisely right" - the trouble with the real world.

PART FOUR: SYNTHESIS

X. Cost-Benefit Analysis of Regulation

The methodology of cost-benefit analysis of present and proposed regulation.

XI. The Urban Truck

The social costs of urban trucking; Is there a greater need for regulation of urban trucking? Charging for social costs.

PART FIVE

XII. Conclusions

February, 1974.

ANNEX 3

DP Research

Mr. D. C. Rao

April 19, 1974

Charles Weiss CW

Research Proposal: Comparative Study of Certain Aspects of Rural Industrialization in India and China

The attached proposal from Jon Sigurdson, was prepared at the suggestion of a number of Bank staff members after a seminar given by Mr. Sigurdson at the Bank in early spring. The proposal itself has been circulated and has received generally favorable responses.

Some reviewers have raised the question of whether the Bank can finance a field trip to China. I have sent a copy of the proposal to Mr. William Clark, Director of External Relations Department, and he has given it his approval.

Many reviewers commented, however, that the methodology and analytical framework were only indicated in general terms, and that the research hypothesis was not clearly spelled out. Contacted by telephone, Mr. Sigurdson agreed that the proposal needed more work. He hopes to have an improved version in June, but it may be necessary to return to India to investigate the availability of data and collaborators before a really satisfactory proposal can be made.

I would therefore propose the following procedure. I am attaching Mr. Sigurdson's proposal, as I received it, along with the Bank research form. I do this to ascertain the Research Committee's reaction to the subject proposed, and in the hopes that they will reserve some funds for later distribution in FY75. Mr. Sigurdson would be grateful for some reaction from the committee, since he must make decisions regarding the terms of his employment with the Swedish government before June, and will probably be without permanent employment thereafter.

I would hope to find discretionary funds to enable Mr. Sigurdson to visit India in order to select and make arrangements with a collaborating institution and to prepare his proposal for resubmission to the Committee, hopefully in September.

The execution of the research would then be in four phases, of which the Research Committee will be approached for funds for the last three.

I. Preparation of Project Proposal (July-Sept., 1974)

II. Preparation of the analytical framework, in collaboration with DRC, in Washington (Sept.-Nov., 1974)

III. Field work in India and China (Dec. 1974 - June 1976)

IV. Writing of final publications (June-Sept., 1976)

CWeiss/rc

O.P. Raveda...

April 18, 1974

Mr. P. A. Green
Scott, Wilson, Kirkpatrick and Partners
5 Winsley Street
London WIN 7AQ
England

Dear Phil:

Attached is a draft contract for FY1975. I haven't had a chance to go over it and it may even contain typographical errors. I wanted to rush it to you before you left for India. There are two things I will need from you before you leave for India:

(i) staff schedule for the entire year; and
(ii) details of external travel.

I have discussed the issue of currency with our people in the Consultants section. They think it is best to leave all estimates in pound sterling. I have, therefore, converted all rates for 1975 from US dollars to pound sterling by dividing by 2.40 and rounding off to the nearest zero or five-digit. I have also moved cost of all supernumerary staff from SWKP overseas to local staff.

On budgetary matters, as we discussed, there is need to reduce the budget by 10 percent. Therefore, I have reduced each budget item by 10 percent and placed this amount under general contingencies. In case of time costs, this in turn has meant that I have had to reduce some SWKP staff time both in UK and overseas. This is strictly for budgetary purposes but is intended to discipline ourselves for spending. Should it be necessary to exceed the budgeted sums in any category, my first preference would be to reallocate from some other budget item. Only as a last resort will we consider using up the contingency funds. If you feel that time allocations can be revised within the budgeted sums, please feel free to do so and advise me of the same. Incidentally, I have reduced construction engineers' time in Indonesia to be in line with our present work schedule there.

I still have to circulate this draft contract within the Bank and changes may have to be made. I would, however, appreciate your comments in the interim.

Our session in Washington was most fruitful. I will look forward to meeting you in the field. I hope you are giving further thought to planning of demonstration projects and the level of aggregation for data collection. We will discuss it in depth during our visit to Kashmir.

With best personal regards.

Sincerely yours,

IKS

Inder K. Sud
Research Division
Transportation & Urban Projects Depart.

D P Research

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: JOHN SIMMONS
INHOTELCOR
MONROVIA

DATE: APRIL 17, 1974

CLASS OF SERVICE: ~~LT~~ ~~Telex~~ LT

IW

COUNTRY: LIBERIA

TEXT:
Cable No.:

YOUR RESEARCH PROPOSALS ARE ENCOUNTERING VERY HEAVY WEATHER stop ALPHA ON EDUCATIONAL REFORM DUNCAN HAS DECLINED TO GIVE EITHER SUPPORT OR NON SUPPORT stop HE SAYS IN PART PROPOSAL IS CONCEPT RATHER THAN PROJECT AND IS UNCLEAR HOW YOUR QUOTE POLICY MODEL UNQUOTE WOULD WORK stop HE IS BOTHERED BY HEAVY RELIANCE DEVELOPED COUNTRY EXPERIENCE AS EXAMPLES stop FRANKLY EYE SHARE HIS RESERVATIONS AND SO DOES THE FRONT OFFICE stop IN THESE CIRCUMSTANCES RESEARCH COMMITTEE UNLIKELY TO ACCEPT STOP EYE WOULD PREFER YOU TO WORK ON MODEL ~~stop~~ COUNTRY DURING SUMMER AND ON MUCH TIGHTER PROPOSAL FOR SUBMISSION IN SEPTEMBER stop EYE AM WORRIED THAT IT WILL EMERGE AS TO SO MANY CONFERENCE DOCUMENTS DO WITH SOME INTERESTING IDEAS BUT WOOLLY ROUND THE EDGES stop IF WE ARE REALLY GOING TO GET INTO SUCH A DIFFICULT SUBJECT LETS DO IT IN SYSTEMATIC WAY stop EYE WOULD GIVE US MORE TIME SELECT INDIVIDUALS AND COUNTRIES AND GIVE EACH MORE TIME AND MONEY stop THEN WE CAN POP OUT A BOOK THAT IS REALLY FIRST CLASS stop BOTH ALSO HAVE PROBLEM WITH COMPLEMENTARY INFORMATION PACKAGE stop EYE AM NOT HAPPY SINCE THIS SEEMS STILL NOT TO EMPHASIZE INTERACTION INFORMATION PACKAGE AND EDUCATION SYSTEM stop ALSO FEEL YOU CANT HANDLE THIS AND GIVE REALLY FIRST CLASS

(CONTINUED - - -)

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME T. KING

DEPT. Development Economics

SIGNATURE Timothy King
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: TKING:jln

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

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Checked for Dispatch:

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION	INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE PAGE TWO

TO: JOHN SIMMONS
INHOTELCO
MONROVIA

DATE: APRIL 17, 1974

CLASS OF SERVICE: LT

COUNTRY: LIBERIA

TEXT:
Cable No.:

EDUCATIONAL REFORM stop ASSUME YOU PREFER REFORM stop IF WE HAVE CHAUDHRI HE SHOULD TAKE CHARGE THIS RESEARCH AND HE TOO HAS SERIOUS RESERVATIONS stop IF NECESSARY PREFER POSTPONE SUBMISSION RATHER THAN FAIL DISMALLY stop

GAMMA RITZEN CANT COME WEEK BEGINNING MAY SIX stop ALSO CAN GET CHAUDHRI SEPTEMBER IF COULD MAKE OFFER QUICKLY stop CONSEQUENTLY WILL TRY ADVANCE RITZEN INTERVIEW EVEN IF YOU ARENT HERE stop MUST CONFESS AM PERSONALLY LEANING HEAVILY TOWARDS DP stop WAS THE TIME HE WOULD BE AVAILABLE YOUR MAIN DIFFICULTY QUERY

BSAIS LETTER INCOMPLETE stop SEND AS IS OR WAIT? REGARDS

KING

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME TIMOTHY KING

DEPT. Development Economics

SIGNATURE Timothy King
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: TKing:jln

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

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Form No. 27 (3-70)

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BSAIS LETTER INCOMPLETE stop SEND AS IS OR WAIT? REGARDS

KING

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: TIMOTHY KING

DEPT. Development Economics

SIGNATURE: Tim King
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: TKing:jlm

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

COMMUNICATIONS SECTION

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For Use By Communications Section

Checked for Dispatch:

QP. Research

Mr. C. G. Harral April 16, 1974

Edward P. Holland

Telephone Conversation with Peter Watson (Northwestern University) on April 12, 1974. -- Singapore Traffic Restraint Study, etc.

I told Watson we were preparing to go to the Bank's Research Committee with the proposal for the Traffic Restraint Study and that it would now in fact be a real research study rather than a semi-operational one. We discussed what requirements he might have for data collection if it was to fit his ideas of model-development. He felt that the 150% factor we had applied to Wildermuth's survey estimates was ample to cover the difference between the original idea of focusing on automobile rush-hour trip makers and a more general sample including bus-riders and some non-CBD trippers, and that with the planned series of three surveys it should be possible to do a really good job of researching the mode choice. He did not feel he would be ready to try his approach on other aspects of decision making except possibly on choice of destination by the time of the third survey.

He said he would send a copy of his Edinburgh-Glasgow questionnaire to Bruno Wildermuth to help him think about the Singapore questionnaire.

On the effects of traffic restraints on CBD retail business, he felt it was a good idea to try to do something if only to be able to say we had tried, inasmuch as some people say that traffic restraints are bad for business. He suggested counting the numbers of people entering selected stores (before and after) and getting some answers on frequencies of shopping trips from household interviews. (But what if shoppers make less frequent trips but spend more money each time?) He felt it would be desirable to try to get cooperation of some merchants in terms of reporting sales figures, but was not optimistic about the feasibility of this approach. He felt that it would be a good sub-project to get a business-school student interested in, with the idea of making it his own research project (maybe for a thesis?)

Watson's availability for long-distance travel is constrained as follows:

> Could not go before 14 June (end of school term); would not like to go before July 1(personal plans already made for latter half of June); busy moving to Washington and getting settled around and after August 1; would not want to be away in September (baby due September 15).

Thus, the best time for a trip would be early to mid-July. Of course, it may not be necessary for him to go at all until latter on, if adequate communications about the surveys can be managed by mail and cable.

Between now and June, he is available to come to Washington on Thursdays or Fridays, since his classes are all on Monday, Tuesday, and Wednesday.

EPH
EPHolland:gbm

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

BAP
OP Research (Income Distribution)

TO: FILES

DATE: April 16, 1974

FROM: E. Chaparro, Economist, LC1DD

SUBJECT: PERU: Income Distribution Study

1. I met on April 11 with Ms. Ullman, DRC/IDD, and tentatively agreed on the following points concerning a possible study of the size distribution of incomes in Peru.

2. During the forthcoming economic mission I will try to reach an agreement with the Director of the Encuesta Nacional de Consumo de Alimentos (ENCA) and other pertinent Peruvian authorities on the general scope and procedure for a possible income distribution study based on the 1971 survey. If the Peruvians agree to make available to the IBRD a copy of the tape containing the results of the survey, the DRC will carry out the study in Washington. Should the Peruvians desire it, DRC would agree to have a representative of ENCA come to Washington and work with Ms. Ullman in the preparation of the report. Alternatively, some arrangement could be made for the DRC to participate in a joint project with ENCA. Ms. Ullman would be able to travel to Lima in May to discuss further details.

3. Assuming that no major statistical problems are encountered in processing the data on the tape, in about 3 months the DRC could produce a draft of a general income distribution profile similar to the one in the recent Malaysia study. This first draft would be mainly descriptive, but would provide a basis for more in-depth study of specific issues.

4. The scope of the more analytical second phase of the study would have to satisfy the needs of three different "publics": the Peruvian Government, LAC and DRC. I said that our requirements in LAC would probably concentrate on policy questions, and in particular on the adequacy of the present Government policies in increasing the living standards of the poorest 40 percent of the population (in absolute terms), and in achieving a redistribution of income. Ms. Ullman mentioned that this was consistent with DRC's interests, although their interest was broader since this study would be part of a world-wide study on income distribution. Depending on when phase one is concluded, the field work of phase two (2-3 weeks) could be done in the last quarter of 1974.

EChaparro:scg
Cleared with and cc.: Ms. Ullman, DRC/IDD
cc: Messrs. Avramovic, Chief Economist, LAC
Holsen, Senior Economist, LAC I
Pfeffermann, Senior Economist, LAC I
Nelson, Division Chief, LC1DD
Guerra, Senior Economist, LC1DD
Mendoza, Loan Officer, LC1DD

O.P. Research
(Singapore Traffic

April 12, 1974

Dr. Damian Kulash
Urban Institute
2100 M Street, N.W.
Washington, D.C.

Dear Damian:

Since our last discussions of the Singapore Traffic Restraint Study, we have had to give up the idea of the Singapore Government financing or managing it and accept it as our own baby. That being so, I have completely rewritten the proposal to make it a genuine research project, and we are going to try to get it funded from the Bank's research funds. The new proposal is enclosed for your information. If you could find time to look it over and react to it, we would like very much to get together with you sometime soon to discuss your comments on it.

Thanks again for your participation in our workshop, which I feel was very helpful to our thinking about urban transport research.

Yours very truly,

Edward P. Holland
Transport Research Division
Transportation & Urban Projects Department

Enclosure

EPHolland:phm

EPH

Record Removal Notice

File Title	Barcode No.
Operations - Research 1972 / 1974 Correspondence - Volume 7	30045545

Document Date	Document Type	
11 April, 1974	Memorandum	

Correspondents / Participants
To: H. Busz
From: Timothy King

Subject / Title
RPO 299: Reallocation and disbursement of funds

Exception(s)
Personal Information

Additional Comments

The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.

Withdrawn by	Date
Sherrine M. Thompson	December 28, 2017

G.P. Research

Mr. G.J. Roth

April 11, 1974

Edward P. Holland EPH

Response to Comments on Draft Proposal for Singapore Traffic Restraint Study.

I appreciate very much your having taken the time to study my proposal and to write comments upon it. Unfortunately, I find myself unable to agree with those comments. I think it may be helpful if I explain why, so here are my reactions:

The Definition of "Restraint"

I am aware that congestion itself is defined by some analysts as a form of restraint, but I hope that this definition will not be generally adopted. It seems very awkward to include congestion in the same conceptual category as all the forms of restraint that are purposely applied and have the effect of reducing congestion. It seems to me somewhat like saying that a man's alcohol consumption is restrained by his getting too drunk to drink anymore.

Emphasis on Measurement of Elasticity

The quantitative measurement of trip-makers' behavioral characteristics still appears to me very important for narrowing down the wide range of uncertainty about the effects of relative prices on trip generation and choice of mode, time of day, destination, and route. If we are going to continue trying to predict these decisions and, moreover, to influence them by pricing policy, we need better empirical foundations. The urgency of making these measurements in this study and on the proposed time schedule stems from the scarcity of such opportunities as this to make before-and-after observations on the effects of large price changes. Attempts to infer price elasticities from cross-sectional data or from trends when there are no sudden changes are far less satisfactory. I realize that you believe optimal -- or at least good -- policies and prices can be arrived at by trial and error, without advance knowledge of behavioral coefficients, and I think I understand your viewpoint, but I am not optimistic enough to share it.

Sampling Framework

This is open to further consideration, and will be reviewed by several survey experts before final decision. However, let me explain that the suggested sample was not intended to be random, but was chosen deliberately to be weighted in proportion to the frequency of rush-hour trips before the restraints (as you point out that it would be). The changes in behavior of people who make more frequent trips are more significant in changing aggregate traffic flows. This relative significance corresponds to the sample bias.

A separate survey is planned covering a random sample of households inside of the priced zone, to ascertain whether the reduction in congestion leads to their making more trips. In case it was not made clear in the proposal, rest assured that the same samples will be used in the "before" and "after" surveys.

c.c. Messrs. Churchill,
Harral,
Venkateswaran

EPHolland:ww

EPH

LI - INTL COUNCIL FOR EDUCATIONAL DEV.

OP - RESEARCH

Mr. T. Mitchell April 10, 1974

Duncan S. Ballantine

Bank's Contribution of US$45,000 for a Study of "Higher Education and Development"

In January this year Mr. McNamara, in response to an application from the International Council for Educational Development, agreed to give the Bank's support to the above study, sponsored jointly by 13 donor agencies and conducted by ICED. The Bank's share has now been determined to be US$45,000. Mr. McNamara has asked me to arrange for payment to be made this week. I would appreciate therefore if you could send a cheque of US$45,000 to ICED and charge the amount to this Department's consultant budget.

RGomez:ro

OP-RESEARCH

Mr. H. van der Tak

April 10, 1974

J. Warford

Economic Research: Public Utilities

The following research projects, financed by the Research Committee, are currently under way:

1.	Village Electrification	(RPO 238)
2.	Pricing & Investment Studies in Public Utilities	(RPO 239)
3.	Standards of Urban Electricity Distribution	(RPO 267)
4.	Telecommunications - Costa Rica	(RPO 276)

Additional funds are being requested for RPO 238 ($13,000) and RPO 239 ($30,000); so far the latter has concentrated only on electricity, but we are proposing to widen it to include water and telecommunications. One new proposal will be submitted to the Research Committee. This will be for a survey of low cost water supplies.

As you know, partly because of our increasing involvement in research projects stemming from loan agreements, staff constraints will not permit us to take on research work in addition to the foregoing. However, if more manpower were available, the department would favor the following areas of research:

1. Water Supply and Health - You are aware of the proposal that was rejected by the Research Committee last year. At least Phase I of this project would be resurrected if we had sufficient staff resources available. I have tried to pass this on to Tim King, but he cannot manage it either. ✓ - Oct. 3, '73

2. Village Electrification - This is covered in the attached memorandum, written by Mr. Anderson.

3. Assistance in Other Departments' Research - A number of research projects, either in progress or contemplated by other Departments, could make use of an input from the Public Utilities Department. Similarly, much of our own work - pricing studies for example - should ideally be carried out with the co-operation of other departments. The work on land use policy in the Urban & Regional Economics Division of DPS is one area in which we have made a small contribution, and where there is scope for a great deal more. Similarly, the work in that division on Municipal Finance and the work of the Public Finance Division of DPS generally could usefully be assisted by us.

cc: Messrs. Rovani, Ray, Anderson

JWarford/ms

D.P. Research

Mrs. Helen Hughes - ECDRR April 9, 1974

David Wall DW - ECDND

Back-to-Office Report: Project on Indian Export Policy; Mission to India, February 7 to March 31, 1974

1. I will not address myself to issues of substance concerning the subject matter of the project which were taken up on this mission as such material will be incorporated in the project report. Also, a separate report will be submitted on the Paris conference which I attended on behalf of the Bank.

2. Enroute to India I stopped in the Philippines to discuss the fieldwork element of the USAID financed joint University of Michigan/ University of the Philippines project on Export Incentives in the Philippines with the project's fieldwork director, Professor Gonzalez Jurado. The Philippines project is very similar to ours in theory and design; I have already discussed the theory behind the project with its U.S. director, Professor C. Staelin. Their project is running about a year behind ours in fieldwork execution and the extensive discussions I had with Professor Jurado consisted mainly of my passing on the benefits of our experience. We went over the questionnaires each project is using and also compared notes on our pilot interview experiences and the projects' methodologies in general. We both, tentatively, concluded that the underlying model of the Philippines project was too sophisticated and their questionnaire too naive and cumbersome to produce significant results. We also both concluded that the Indian project was using a more pragmatic methodology and more realistic questionnaire and was consequently more likely to produce meaningful results. We agreed to keep in touch on the progress of our projects. I have copies of the underlying model and the questionnaire if anyone would like to see them. I hope to stop in Manila again in the summer when their firm interviews are scheduled for completion.

3. I also stopped over in Bangkok where I met with officials of ECDCEN (Economic Cooperation Center for the Asian and Pacific Region) to discuss their project on export incentives in the East Asian region. Unfortunately, the director of this research program was away on mission and I was only able to discuss the study in general terms. Early indications are that the study is desk based and unlikely to be of high quality, although a final judgement will have to await the publication of their report, which is expected soon. In Bangkok, I also had discussions with trade economists of ECAFE (including the director of the ECAFE Trade Promotion Center), faculty members of Thammasat University, and the Regional Coordinator of USAID programs.

4. On arrival in India it transpired that none of the agreed preparations for my visit had been undertaken. In particular, the senior economist responsible for carrying out local project supervision and for sharing the firm interviews with me had not been appointed; the junior economist allocated to the project for the last two years had been given two months leave to undertake a training program in Europe, and was to be absent for the whole of my stay in India; the annotated sample of firms for interview had not been drawn up and only a list of firms pulled from TDA files was ready; the sample list overlapped (contrary to instructions) with the sample used by the Bank's local office for its export survey; the letter inviting firms to participate had not been sent out; the questionnaires had not been sent out until February 8, and firms were told that they need not be returned until February 27 (i.e. 10 days after my arrival); the project secretary had not been appointed and no secretarial services were available for the first few days; and various important materials had not been collected. The main reason for these various factures would appear to be the fact that a large proportion of the co-director's time has been taken up by administrative duties in the TDA, unrelated to research; in addition, he is directing four other relatively large projects.

5. The lack of preparation for my visit led me to decide to (a) cut down on the number of interviews I would personally conduct, and (b) to put back the commencement of my interview schedule. This allowed me to spend the first two weeks in New Delhi supervising the appointment of staff and the preparations for the interviews (including drawing up an amended, more representative sample). In the event the TDA decided not to appoint a senior economist, but to hire two consultants on a short-term basis to conduct interviews and prepare the TDA report on the fieldwork. Two high-level consultants were approached and accepted offers of appointment, although at the very last moment one withdrew as apparently he wanted to go to Bombay and not Calcutta as called for under the interview schedule.

6. Meanwhile it had been agreed that I should undertake the interviews in South India, and cables were sent to the 17 firms in the sample which were located in the South. All agreed to cooperate and on March 1 I left for Cochin to begin interviews. Of the 17 establishments, one turned out to be a "shell" company maintained by another on the sample for tax purposes. Of the remaining 16, 11 cooperated in full giving all data asked for and freely of managerial time to discuss the issues raised; the other two promised to give most data required but did not offer much in the way of discussion. The firms covered included one producer of bicycles, one bicycle parts, one radiators, two leather products, one electronic items, and 10 fish products.

7. On my return to New Delhi, I discovered that very few of the other 43 firms had been interviewed. It turned out that one of the TDA staff members had been seconded to the project but taken off it after one interview, and no replacement found and that a disagreement had cropped up with the TDA administration over subsistence costs payable to outside (Indian) consultants. The consultant had, however, commenced the interviews (after a delay) on the basis of an informal assurance that some way of covering his costs would be found (it was).

8. I spent most of the rest of my time discussing existing (and potential changes in) export policy with various Government officials, including the Chief Economic Advisor to the Government of India, the Economic Advisor to the Ministry of Commerce, the Director of the Export Assistance Cell, and various officials in the Planning Commission, the Ministry of Commerce, and the Finance Ministry. We also sought another consultant and were fortunate to obtain the services of Dr. Panchamukhi of Bombay University - the first consultant being Professor Tewari of Himachal Pradash University.

9. By the time I left India, about half the interviews had been successfully completed, two first-class consultants had been retained to conduct the remaining interviews, the office staff team had been reconstructed, and most of the materials I sought had been obtained. If the current schedule is kept to, interviews will have been completed by the end of April, the first draft of the TDA report completed by Professor Tewari by May 7, and the final TDA report (on the firm interviews) received in Washington around May 15. The slippage, in terms of submission date from the original (informal) agreement, is about six weeks - compared to the five months slippage on the Bank's side.

10. Making allowance for the fieldwork slippage, the proposed schedule for the remaining work on the project is as follows: preparation of the "operational" report to the Government of India in time to submit a first draft by June 15; submission of the final draft to a seminar of Government officials in New Delhi in the third week of July; and work on the monograph arising out of the whole project with a view to having a substantial part of it available in first draft form by late September. The aim is to have the final manuscript ready early in 1975.

11. Can we draw any lessons from our project to provide guidance for future collaborative research? Not many, except the obvious one that long-distance collaboration between full time researchers in the Bank and researchers with other responsibilities in developing countries is fraught with difficulties and considerable patience is called for. Our main problem has been the lack of a senior collaborator with more or less full-time responsibilities for local work -- we had one but she got married and went to live in Brussels at a crucial time in the

project. Secondly, a local junior researcher responsible for responding to mundane requests for materials and data processing is essential; we have had one for the full life of the project but he was given permission to go abroad for training, again, at a crucial time in the life of the project -- and given the difficulty of getting such permission and the relatively transient nature of a project such people cannot be blamed for placing first priority on training. The moral here might be to ensure that local project staff have recently been abroad for training or have no plans to go abroad for the duration of the project. And, finally, there is a trade-off between the advantages (access to people and material and ways round red-tape) and disadvantages (priority given to Government business and prevalence of bureaucratic detail) of using a collaborating agency which is in the government sector. In the event, the choice of agency will depend on the nature of the research topic and on situation specifics such as the nature and position of the personnel involved. In our case, despite our problems, I am convinced that TDA was the optimal choice for local collaborator, although this is partly due to the fact that where intra-government agency antagonisms existed I was able to fill in the "access" gaps with my own pre-project contacts. One general conclusion, I think valid, is that research directly on policies is better conducted within the Government framework while research with indirect policy implications is best undertaken independently of the Government. I am preparing a separate paper on the advantages and disadvantages of collaborators using the Bank as a base for research.

DWall:dvh

cc: Mr. V. Prakash
Mr. R. Gulhati

OP-RESEARCH

Mr. Warren C. Baum April 9, 1974

Duncan S. Ballantine

Quarterly Progress Report on Policy and Research Under Education

As indicated to you when we submitted the December 31, 1973 version of the above report, eleven of the eighteen tasks undertaken by this Department can be considered complete, two of them are on schedule and five have slipped. Four of the slippages are due to the delay in filling positions left vacant as a result of staff transfers. Of these, three are the result of the unfilled architectural advisor's position. My memorandum to you of March 22 explains the reason for slippage in the completion date of the Sector Working Paper.

Enclosure: Quarterly report

RGomez:ro

Form No. 605
(4–73)

CENTRAL PROJECTS STAFF

Education DEPARTMENT

QUARTERLY PROGRESS REPORT ON POLICY AND RESEARCH TASKS/PROJECTS UNDER EXECUTION, 1/ STATUS AS OF March 31, 1974

TASK/PROJECT	STAFF	DATES						REMARKS
		Start		First Draft		Completion		
		Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	
1. Educational Implications of Development Policies Emphasizing Social Equity Objectives	Erder Jallade	Jan. 1973	Jan. 1973	Jul. 1973	Jul. 1973	Sep. 1973	Jul. 1973	Task completed. Working notes inserted into the draft Sector Policy paper.
2. Nonformal Education for Rural Development	Ballantine Erder Futagami	Mar. 1973	Apr. 1973	---	Apr. 1973	Jul. 1973	Aug. 1973	Final Report distributed.
3. Educational Achievement; the Relation between Students' Socio-economic Background and Performance	Erder Maas Ballantine	Apr. 1973	Feb. 1974	Sep. 1974	Nov. 1973	Dec. 1974	Dec. 1974	Slippage due to staff constraints; Maas joined the Dept. in Jan. 1974.
4. The Process and Management of Education Reforms	Erder Ballantine	Oct. 1972	Oct. 1972	Mar. 1973	Mar. 1973	Jun. 1973	Aug. 1973	Task completed.
5. Health Personnel Training Items in Education Projects	Brandenburg	Jan. 1973	Jan. 1973	Feb. 1973	Feb. 1973	Feb. 1973	Apr. 1973	Final Report distributed.
6. Preparation of Sector Policy Paper II	Ballantine Erder Jallade Gomez LeBlanc Brandenburg	Oct. 1973	Jul. 1973	Jan. 1974	Jan. 1974	Mar. 1974	Oct. 1974	Delayed by reassignment of staff to urgent operational work, etc.
7. Handbook for Project Implementation	To be appointed	Jan. 1973	Jan. 1973	Jun. 1973	Jul. 1973	Nov. 1973	Dec. 1974	Handbook drafted and planned for completion under proposed FY75 work program. Suspended in July 1973 by transfer of architectural advisor without replacement.

1/ *Include tasks/projects completed within the quarter, under way or expected to start within the next quarter. Tasks expected to start in the next quarter should be reported separately, after those completed or under way.*

CENTRAL PROJECTS STAFF

Education DEPARTMENT

QUARTERLY PROGRESS REPORT ON POLICY AND RESEARCH TASKS/PROJECTS UNDER EXECUTION, 1/ STATUS AS OF March 31, 1974

TASK/PROJECT	STAFF	DATES						REMARKS
		Start		First Draft		Completion		
		Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	
8. Schedules of Accommodation and Space Standards for Educational Institutions	Lewis (with contribution from Unesco Cooperative Program)	Apr. 1973	Sep. 1973	Sep. 1973	Mar. 1974	Dec. 1973	Jun. 1974	Schedule slipped as Mr. Lewis is not able to join Dept. until mid-April 1974. This will now be undertaken under the proposed FY75 work program; therefore, timetable will be rescheduled.
9. Updated Guidelines for Technical Assistance	Dunnill	Nov. 1972	Nov. 1972	Apr. 1973	Mar. 1973	May 1973	Mar. 1973	Report dated March 29, 1973 distributed.
10. Education Indicators	Erder Gomez		C o n t i n u o u s					
11. Study of Cost Estimates on Equipment, Expansion of Basic Equipment Lists.	Brandenburg	Feb. 1973	Feb. 1973			Oct. 1973	Sep. 1973	Report completed Sep. 1973; has been distributed. Updating to be done under proposed FY75 work program.
12. Project Implementation Monitoring System		Oct. 1973	Oct. 1973	Jan. 1974	Jan. 1974	Mar. 1974	Mar. 1974	Due to staff constraints, this will not only be slipped to FY75 but will become part of a task to analyze and implement an education project to be undertaken under the proposed FY75 work program; schedule will therefore be changed.
13. Unit Costs in Education Projects	Thint	Mar. 1974	Apr. 1973	Jul. 1974	Sep. 1973	Oct. 1974	Oct. 1973	Final Report distributed in Oct. 1973.
14. Study of Project Costing	Lewis (with contribution from Unesco Cooperative Program)	Nov. 1973	Nov. 1973	Mar. 1974	Mar. 1974	Jul. 1974	Jul. 1974	Study slipped into FY75 as Mr. Lewis is unable to join Dept. until mid-April 1974; schedule will be given upon approval of proposed FY75 work program.

1/ *Include tasks/projects completed within the quarter, under way or expected to start within the next quarter. Tasks expected to start in the next quarter should be reported separately, after those completed or under way.*

Form No. 605
(4–73)

CENTRAL PROJECTS STAFF

Education DEPARTMENT

QUARTERLY PROGRESS REPORT ON POLICY AND RESEARCH TASKS/PROJECTS UNDER EXECUTION, 1/ STATUS AS OF March 31, 1974

TASK/PROJECT	STAFF	DATES						REMARKS
		Start		First Draft		Completion		
		Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	
15. Project Evaluation Techniques and Procedures	Erder Maas	Jul. 1973	Jul. 1973	Jan. 1974	Jan. 1974	Jun. 1974	Jun. 1974	On schedule.
16. Comparison of the Cost-Effectiveness of Alternative Learning Technologies in Vocational Training	Erder Jallade (Consultant)	Nov. 1972	Nov. 1972	Jun. 1973	Jun. 1973	Sep. 1973	Oct. 1973	Report completed and distributed as Bank Staff Working Paper No. 169
17. Functioning of Labor Market	Erder Jallade							Project being executed by Development Economics Department; is expected to be completed by end of 1974.
18. Education Finance	Jallade Erder (Consultants)	Jan. 1973	Jan. 1973	May 1973	Jun. 1973	Jul. 1973	Jul. 1973	Task completed. Report distributed as Bank Staff Working Paper No. 157.
19. Education Mass Media	Futagami	Jan. 1973	Jan. 1973	Apr. 1973	May 1973	Jun. 1973	Sep. 1973	Report dated Sep. 20 circulated.

1/ Include tasks/projects completed within the quarter, under way or expected to start within the next quarter. Tasks expected to start in the next quarter should be reported separately, after those completed or under way.

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

YELLOW cc: OPR-RESEARCH

OFFICE MEMORANDUM

TO: Mr. Jorge Cauas, Director, DRC

DATE: April 8, 1974

FROM: D. C. Rao

SUBJECT: Completion Reports for Research Projects

1. The following research projects in your Department were not authorized to spend any money in FY74 and, I presume, have been completed. Could you please arrange for the project supervisor to fill out the attached completion reports and return them to me by May 6. NOT ATTACHED

2. If the work on any of these projects is not yet completed, please include a brief Status Report in the quarterly submission that is due by April 15.

3. Quarterly Status Reports should continue to be submitted until these projects are completed, when a Completion Report should be completely completed.

RPO Projects

Country Programming Study - Chile (RPO-202)
International Model (RPO-207)
Size Distribution of Income (RPO-209)

cc: Mr. Ernest Stern
Miss Myrna L. Gary
Mrs. Mona Hazzah

DCRao/wg

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

YELLOW

OFFICE MEMORANDUM

TO: Mr. Jorge Cauas, Director, DRC

DATE: April 8, 1974

FROM: D. C. Rao

SUBJECT: Development Strategies in Semi-Industrial Countries (RPO-201)
- and -
Ivory Coast Programming Models (RPO-204)

1. Although there has been no expenditure from the Research Budget on these projects in FY74, I understand the work has not yet been completed. Could you please arrange to include a brief status report on the above projects in the quarterly submission that is due by April 15.

2. Please continue to submit Quarterly Status Reports until you are able to submit a Completion Report.

cc: Mr. Ernest Stern
Miss Myrna L. Gary
Mrs. Mona Hazzah

DCRao/wg

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OP-RESEARCH

YELLOW

OFFICE MEMORANDUM

TO: Mr. Montague Yudelman, Director, AGP DATE: April 8, 1974

FROM: D. C. Rao

SUBJECT: Completion Records for Research Projects

1. The following research project in your Department was not authorized to spend any money in FY74 and, I presume, has been completed. Could you please arrange for the project supervisor to fill out the attached completion report and return it to me by May 6. NOT ATTACHED

2. If the work on this project is not yet completed, please include a brief Status Report in the quarterly submission that is due by April 15.

3. Quarterly Status Reports should continue to be submitted until the project is completed, when a Completion Report should be completely completed.

RPO Project: A Study of Irrigation Water Charges (RPO-272)

cc: Mr. Ernest Stern
Mrs. Mona Hazzah

DCRao/wg

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OR-RESEARCH

OFFICE MEMORANDUM

YELLOW

TO: Mr. William Diamond, Director, Asia Region

DATE: April 8, 1974

FROM: D. C. Rao

SUBJECT: Completion Reports for Research Projects

1. The following research project in your Department was not authorized to spend any money in FY74 and, I presume, has been completed. Could you please arrange for the project supervisor to fill out the attached completion report and return it to me by May 6. NOT ATTACHED

2. If the work on this project is not yet completed, please include a brief Status Report in the quarterly submission that is due by April 15.

3. Quarterly Status Reports should continue to be submitted until the project is completed, when a Completion Report should be completely completed.

RPO Project: Mechanization in India, Its Extent and Its Effect on Hired Labor (RPO-250)

cc: Mr. Ernest Stern
Mrs. Mona Hazzah

DCRao/wg

Record Removal Notice

The World Bank Group Archives & Records Management

File Title	Barcode No.
Operations - Research 1972 / 1974 Correspondence - Volume 7	30045545

Document Date	Document Type
08 April, 1974	Letter

Correspondents / Participants
To: S. C. Brealey, Powell Duffryn Technical Services Ltd.
From: E. Friedman, Energy Adviser, Public Utilities Department

Subject / Title
RPO 299: Reallocation and disbursement of funds

Exception(s)
Personal Information

Additional Comments

The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.

Withdrawn by	Date
Sherrine M. Thompson	December 28, 2017

Archives 01 (March 2017)

D.P. Research

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Distribution: Agriculture & Rural Dev.

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INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

Mr. Rao
D.P. Research

TO: Research Committee Members **DATE:** April 5, 1974

FROM: Hollis B. Chenery, Vice President, Development Policy

SUBJECT: Evaluation of Research Projects

The following guidelines will apply for the intensive evaluation of selected research projects on completion.

A. Content. The evaluation will have three elements:

(i) Quality of Output: Does the output meet expectations based on the original research proposal? Has the research problem been redefined or the methodology changed along the way? If the methodology was not clearly specified in the proposal, is the chosen methodology appropriate? With the benefit of hindsight, does the original research proposal still look like something that should have been financed?

(ii) Implementation: What were the contributions of Bank staff, developed country consultants and LDC institutes/consultants to the research? Where there was some collaboration with LDC institutes, what was the scope of collaboration in research design, collection of data, analysis of data and presentation of results? What would have been the costs/benefits of greater LDC collaboration?

(iii) Dissemination: Are the results of the research worth disseminating? Who are the potential users in the Bank and elsewhere? What has been done to disseminate the results? What more should be done to make sure that the research results are applied in Bank operations?

B. Procedure

(i) Selection of Projects: This intensive evaluation should be undertaken only for large and interesting projects so as not to over-burden the members of the Research Committee. An initial selection of 12 research projects has been approved by the Committee at the meeting on March 25. If any member wishes to add to the list, he should contact Mr. Rao.

(ii) Sub-Committees: A sub-committee of two members of the Research Committee will be responsible for the evaluation. At least one of the members of the sub-committee will be from a department that is not supervising the research project. The members of the sub-committee will prepare a (preferably joint) report to me evaluating the project. Mr. Rao will distribute the report to all members of the Research Committee and put it on the agenda for the next meeting of the Committee.

(iii) Timing: The evaluation should be done when a draft final report is ready for distribution. Mr. Rao will keep in touch with the research project supervisors and alert the evaluation sub-committees at the appropriate time. Adequate notice will be given for study of the report by the evaluation sub-committees.

(iv) Form: The form of the evaluation will be decided by the two sub-committee members in consultation with the project supervisor. In general, there should be a seminar with one or two discussants who will comment on the research report. The project supervisor should invite the Executive Directors to the seminars (through the Secretary's Office). Where necessary, LDC collaborators may also be invited to participate in the seminar. Following the seminar, it may be desirable for the sub-committee to have a small meeting with the project supervisor and relevant department director. Mr. Rao will be available to assist the sub-committee in making the necessary arrangements.

(v) Finance: In most cases, the cost of the evaluation will be absorbed within the project's budget. In special cases (e.g., where an LDC collaborator is invited), it may be necessary to apply for supplementary finance. Such requests should be forwarded to Mr. Rao.

cc: Mr. D. C. Rao
Mrs. Mona Hazzah

OP-RESEARCH

April 5, 1974

Research Committee Members

Signed Hollis B. Chenery

Hollis B. Chenery, Vice President, Development Policy

Evaluation of Research Projects

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(ii) Implementation: What were the contributions of Bank staff, developed country consultants and LDC institutes/consultants to the research? Where there was some collaboration with LDC institutes, what was the scope of collaboration in research design, collection of data, analysis of data and presentation of results? What would have been the costs/benefits of greater LDC collaboration?

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(v) Finance: In most cases, the cost of the evaluation will be absorbed within the project's budget. In special cases (e.g., where an LDC collaborator is invited), it may be necessary to apply for supplementary finance. Such requests should be forwarded to Mr. Rao.

cc: Mr. D. C. Rao
Mrs. Mona Hazzah

DCRao/wg

OFFICE MEMORANDUM

R.5- V-1
cc: OP-RESEARCH

TO: Files DATE: April 4, 1974

FROM: Lars Jeurling (ECN,LCPWS)

SUBJECT: EL SALVADOR: Report on Seminar on Rural Electrification and Discussion of Progress of the Ecuador Rural Electrification Study

Introduction

1. According to terms of reference dated February 14, 1974, I visited El Salvador from February 23-26, together with Dr. James Ross (Consultant) and Mr. Dennis Anderson (CPS). In El Salvador we met with the team working on the rural electrification study in that country and with two members of the Ecuador rural electrification team (Jorge Claro and Jose Fernandez). The purpose of the visit was to participate in seminars organized by the El Salvador study team presenting the preliminary results of the El Salvador study and discuss the progress of the Ecuador study. The Seminar highlighted factors that determine the feasibility of rural electrification projects (para. 12).

Actions to be Taken

2. A mission consisting of Dr. Ross, Dr. Saunders and myself should be scheduled to Ecuador for the first half of May to assist in the analysis of the data collected through the household, enterprise and community surveys (para. 6).

Progress of the Ecuador Study

3. Jorge Claro and Jose Ramon Fernandez informed me that the household survey has now been carried out and that the study team is faced with the cumbersome work of codifying and tabulating the information collected. The analysis of the data collected will be made with the view of forecasting future demand for electricity and appliances. Some particularly important data to be analyzed are:

Family Income
Family Size
Wealth
Family Expenditure Pattern
Type and Extent of Employment
Ownership of Electrical Appliances
Housing Conditions
Volume and Cost of Energy Consumed
Present Uses of Energy

In particular the following relationships will be studied:

Family Income - electrical/energy consumption
Family Income - ownership of electrical appliances
Ownership of electrical appliances - consumption of electricity

4. The sociological analysis will concentrate on measuring the level of living index (see my back-to-office report of November 29, 1973) experimenting with different weights to the components of the index.

5. Weighting of the level of living index will be carried out as soon as possible in order to provide ample time for discussion of the weights to be used and implementation of the concept.

6. The members of the Ecuador study team, Dr. Ross and myself reviewed the community, industry and agricultural questionnaires to be used in Ecuador (see my back-to-office report of November 29, 1974) and agreed that the agricultural and industrial questionnaires would be consolidated into an agro-industrial questionnaire. The methodology used and the information obtained in the agro-industrial survey in El Salvador should be extremely useful to the study in Ecuador. We prepared an "Inventory of Agro-Industries" form to obtain basic information on output, employment and electric substitutable equipment for each industrial enterprise to determine resource savings and other benefits from electrification.

7. We agreed that the field work should proceed as follows:

(a) The Community Survey should be conducted in all villages in the project and control areas. Geographic boundaries should be defined for all communities surveyed. Existing industries in each community should be identified as part of the Community Survey.

(b) Following the Community Survey, an inventory of all agro-industries should be conducted.

(c) From the inventory of agro-industries, a sample should be selected for in-depth case studies. The sample should include two or three enterprises of varying size within each type of agro-industry, e.g., trapiches, dairies, hatcheries, saw mills, etc.

8. We also agreed that Jose Ramon Fernandez should work with the Empresa Electrica Quito (EEQ) to prepare the cost data for the electrification project as soon as possible.

9. Based on the experience from El Salvador and because of the scarcity of information on prices in the Ecuador study area, we decided not to attempt in this first stage of the study to estimate (price) demand curves for electricity and appliances. We had earlier (see my back-to-office report of November 29, 1973) decided to attempt to use demand curves as one alternative way to measure benefits from electrification. The determination of benefits will now concentrate on measuring resource savings, increased production and increased levels of living.

The Ecuador Study Team

10. The study team has undergone some major changes which, however, on the whole, I think have been beneficial to the study. Jorge Claro, a Chilean econometrician and engineer, is now the Chief Economist, and Mauricio Davalos has left the study entirely to dedicate himself to research for his dissertation. I consider Jorge Claro to be more capable and, in particular, more responsible than Mauricio Davalos and welcome the change.

11. The project director himself, Rodrigo Espinosa, has had a very minor input into the study and I do not expect him to make any substantial contribution, considering all of his other engagements, especially with the Central Bank. His main function is to lend the prestige of his name to the study. This would be a serious concern if we did not have capable team members. However, with Jorge Claro and Jose Ramon Fernandez, a hard-working and dedicated economist, on the team, I am less concerned. The sociologist appears to be less dedicated (he did not participate in the field work, for instance) but should, with the help of John Saunders (sociologist consultant to EEQ) be able to write his part of the report. The computer specialist, Carlos Terneus, has been doing a good job so far.

The Feasibility of the Ecuador Rural Electrification Project

12. Preliminary results from El Salvador study indicate that investments in rural electrification could be justified, especially when there is a strong industrial demand. However, it seems (comparing El Salvador to the project area in Ecuador) that conditions are extremely unfavorable for rural electrification in the project area in Ecuador. The main reasons are:

(a) Low density of population, difficult topography and long transmission lines make the investment per capita at least three times as high in Ecuador as in El Salvador;

(b) There are few industries in the project area in Ecuador and they are small; and

(c) The per capita income is lower in Ecuador.

The rate of return of the Ecuador rural electrification project is therefore likely to be strongly negative even if an attempt will be made to quantify benefits which are normally not taken into account in the rate of return calculations. Although, there are no firm data to compute the rate of return, I think it is important to point out at this early stage of the study that the project is not very likely to be viable for three reasons:

(i) Although in theory the value of the study as a research effort should be independent from the economic justification of the electrification project, this may not be the case in practice. I fear that the mere fact that the study will demonstrate the nonviability of this particular project (which was unfortunately selected as a pilot Bank Project) may be taken as an indication in the Bank that rural electrification in general is not justified. I am confident that in addition to the conclusions with regard to this particular project, the study will come up with general conclusions about costs and benefits of rural electrification which will serve when evaluating other projects.

(ii) The National Institute of Electrification (INECEL) is now embarking on a major rural electrification program financed through plentiful oil revenues. I suspect that the unfavorable conditions in the project area are not unique for Ecuador and that INECEL ought to study the feasibility of its rural electrification program more carefully. The final conclusions of the EEQ study will only be available in about five years, that is when INECEL plans to have a major part of the rural areas already electrified. I have had a chance to review some of the arguments in favor of the program presented by INECEL at a Guayquil conference on rural electrification in February 1974, and they seemed indeed very weak. I recommend that the Bank, in a letter to INECEL, point out some of the stumbling blocks that might be encountered in rural electrification based on the experience of the El Salvador study and the preliminary conclusions of the Ecuador study, and propose some cut-off criteria that could be used to postpone the least promising projects until the results of the EEQ study and other studies are available.

(iii) Although it is probably too late, I suggest that the Bank review with EEQ the least-cost solution of the project. The cost of its major component, a 130 km transmission line, should be compared to the cost of generating the energy locally even if this would imply lower service standards for the rural population.

cc: Messrs. Sheehan (LCPPT), Kalbermatten (LCPWS), McCarthy (LC1DD), Kaps (LC1DB), Anderson (PBP), Warford (PBP), Cavallotti (LCPPT)

LJeurling:mp

OR-RESEARCH

Mr. Ernest Stern April 4, 1974

D. C. Rao

Dissemination and "Operational Relevance" of Research Projects

1. The "operational relevance" of research is a long-standing question. Assuming that the research program is in fact operationally relevant and that popular beliefs to the contrary are misconceived, there are two things we can do:

(a) Disseminate better.
(b) Acknowledge research contributions.

Disseminate Better. This is the technique emphasized in the Kearns Report which recommends that simple summaries of research results be widely distributed to operational staff. 1/ While something along these lines is clearly desirable, one must be aware of the limitations of this approach. First, not all research produces results which are worth disseminating. Secondly, even some successful research projects are not of interest to operational staff, e.g., those that make methodological contributions. Thirdly, the results of individual research projects may only be grasped in a conceptual framework which operational staff might not (or might) possess. Finally, it is not at all obvious that operational staff would enjoy being subjected to a barrage of isolated nuggets of wisdom in and uncoordinated fashion.

Therefore, I would favor a system that disseminated information about the program rather than capsule summaries of results. I would recommend the following steps:

(1) Distribute "Abstracts of Current Studies" and "Research Program Documents" to all professional Bank staff, annually.

(2) Announce the publication of Working Papers (and Policy/Issue Papers (?)) in the Weekly Bulletin.

(3) Where specific research projects are judged to be of direct operational interest (e.g., country-based commodity studies), make sure that the relevant sections of operational staff receive the papers, are invited to seminars, etc.

1/ The recommendation reads "simplify research papers and clearly describe their relevance to policy and operations".

Acknowledge Research Contribution. A number of Policy, Issue and Working Papers rely significantly on research findings but do not acknowledge this.

The April inventory lists 45 Policy/Issue Papers. From the outlines of the Policy Papers and the titlesof the Issues Papers, it would appear that 16 of them are directly related to external research projects which have been recently completed or close to completion. (See Annex 1).

During the twelve-month period February 1, 1973 to January 31, 1974, we issued 31 Staff Working Papers of which 10 were the result of external research projects.

In recent months, the Public Utility Projects Department has been issuing Public Utility Notes of which at least 2 appear to rely on research findings.

Admittedly, these observations are very superficial and subject to error. But they do indicate that research findings are, at least sometimes, translated into policy directions that are of operational relevance. However, no one seems to acknowledge their dependence on the external research budget. Neither Working Papers, nor Policy Papers, nor Public Utility Notes, refer to the research projects.they have found useful. The only exceptions that cite research projects are two Working Papers (one by Mr. Chenery and the other at our request) and one PU Note.

I would recommend that:

(1) The standard cover sheet format for Working Papers should include a reference to the research project number;

(2) Policy Planning and Program Review Department be asked to ensure that Policy/Issue Papers specifically acknowledge their reliance on research projects with appropriately-placed footnotes. I can work out an implementation schedule with them;

(3) Public Utility Notes and similar communications to operational staff should do likewise.

DCRao/wg

Annex 1.

POLICY AND ISSUES PAPERS WITH RESEARCH INPUT FINANCED BY EXTERNAL RESEARCH BUDGET
(As of April 1, 1974)

	Policy/Issue Paper Subject	Dept.		Related Research Project Subject	Dept.
General					
I04G74	Development Strategies in Semi-Industrial Countries	DPS-DRC	201	Development Strategies in Semi-Industrial Countries	DPS-DRC
I08G75	Civil Works Design Criteria	CPS-TRP	226	Labour Substitution in Civil Construction	CPS-TRP
Agriculture and Rural Development					
P02A74	Bank Policy on Financing Cocoa	DPS-EPD	281	Cocoa Production	DPS-EPD
P03A74	Land Reform	CPS-AG-DPS	280	Land Reform Strategies in Latin America	DPS-ECD
P05A75	Rural Development	CPS-AGP	(218	Africa Rural Development Study	DPS-ECD
			(293	Lilongwe Land Development	DPS-ECD
			(237	Village Water Supply	CPS-PBP
			(238	Village Electrification	CPS-PBP
I02A74	Issues in the Formulation and Appraisal of Rural Development Projects	DPS-ECD	218	Afric Rural Development Study	DPS-ECD
I03A75	On-Farm Mechanization	CPS-AGP	.212	Re-Appraisal of Credits for Financing Farm Mechanization in India	CES
			214	Agricultural Mechanization in India	CPS-AGP

Education and Human Resources					
P01E75	Revision of Education Sector Policy Paper	CPS-EDP	251	Survey of Non-Formal Rural Education	EDP
			244	Student Loan Schemes	CPS-EDP
			246	Cost-Effectiveness of Alternative Learning Technologies in Vocational Training	CPS-EDP
Multi-Sector					
I01H74	Economic Analysis of Projects	CPS-VPS	208	Studies on Shadow Pricing	DPS-DRC
I02H74	Measurement of Shadow Prices	CPS-VPS	208	Studies on Shadow Pricing	DPS-DRC
Population and Nutrition					
I01N75	Issues in Family Planning	DPS-ECD	262	Cost Patterns of Official Family Programs	CES
Power					
P02P74	Lending for Village Electrification	CPS-PBP	238	Village Electrification	CPS-PBP
Industry					
I07I75	Industrial Policies and Economic Integration	DPS-DRC	287	Industrial Policies and Economic Integration in West Africa	DPS-DRC
I08I74	Fertilizer Production and Policy	IFC	224	Programming in the Manufacturing Sector	DPS-DRC
Urbanization					
P02U74	Bank Policy in Urban Transport	CPS-UGP	234	Urban Transport and the Automobile	CPS-UBP
Water					
P01W74	Lending for Village Water Supply	CPS-PBP	237	Village Water Supply	CPS-PBP

March 4, 1974

Annex 2.

Working Papers Related To Research Financed Out Of External Research Budget - February 1973-January 1974

Working Paper No.	Subject	RPO No.
172	Study of the Substitution of Labor and Equipment in Civil Construction: Phase II Final Report	226
171	Jute for the Synthetics	211
169	Cost Effectiveness of Alternative Learning Techniques	246
165	Alternative Strategies for Development	205
162	Automobiles & Cities -- Strategies for Developing Countries	234
157	The Financing of Education: An Examination of Basic Issues	244
153	A Conceptual Framework for the Planning of Medicine in Developing Countries	248
152	Nutrition and Health of Indonesian Construction Workers: Endurance and Anemia	226
144	On the Social Rate of Discount and Price of Capital in Cost-Benefit Analysis	208
142	Estimating the Shadow Price of Foreign Exchange in Project Appraisal	208

March 4, 1974

OP-RESEARCH
(RPO 320) Logged
Ap. 9, 74

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~~Holland~~
file: Urban T. Res.

Dr. Clell G. Harral
Chief, Transport Research Div.
Transp. & Urban Projects Dept.
World Bank
1818 H. Street N.W.
Washington D.C., 20 433 U.S.A.

Deres ref.: Vår ref.: S.H./S.R. Molde, 3rd April 1974

Dear Clell,

Thank you for a very stimulating and interesting workshop. I talked to Professor Åke Andersson in Gøteborg to-day, and the papers on dynamic aggregate planning strategies used in our Stockholm Study will be mailed to you directly from Sweden. Some of the basic papers are unfortunately still only available in Scandinavian, but I'll do some rewriting this summer before going to Australia because I'll be dealing with such aspects there in August.

With regard to my C.V. I'll finish it and forward it to you as soon as my Kenya mission for NORCONSULT is completed, probably in late May. If that is too late, let me know and I'll make it up faster.

Attached to this letter is the request for payment and the statement of expenses. The insurance and notification papers arrived at my desk after I had left Norway and I see no purpose completing them now.

Please give my best regards to Pam, Ed and Djengis.

Sincerely yours,

Stein Hansen
ass. professor of transport economics.

./.

MØRE OG ROMSDAL DISTRIKTSHØGSKOLE
POSTBOKS 308, 6401 MOLDE TLF. (072) 51 011

Dr. Clell G. Harral
Chief, Transport Research Div.
Transp. & Urban Projects Dept.
World Bank
1818 H. Street N.W.
Washington D.C., 20 433 U.S.A.

Vår ref.: S.H./S.R.

Molde, 3rd April 1974

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Stein Hansen
ass. professor of transport economics.

OP-RESEARCH

Mr. D. A. Strombom, Division Chief (Transportation and Urban Projects)

April 3, 1974

C. E. Madavo CEM

Suggested Research Topics

1. Further to the discussion in the Division Meeting on the above topic, I would like to shell out a few more suggestions for research on two of the topics: economic evaluation and institutional arrangements for site and services and upgrading projects.

Institutional Arrangements

2. Assuming satisfactory mechinery is created for servicing and allocating plots, the next critical issues appear to be tenure and payments collection. The first because it is presumed to influence people's willingness to invest and the latter for its implications om replicability. On both these points, we are currently operating on the basis of conventional wisdom some of which is fast becoming a new theology.

On tenure, for example, a number of questions could be addressed. What kinds of tenure arrangements are being used in various site and services and upgrading schemes? How do residents of chosen areas perceive tenure? Does tenure have any noticeable impact on people's willingness to invest?

Questions similar to the ones above should be addressed on the issue of payments collections. Due to the broad nature of both tenure and collections, the research might best be done through case studies.

Economic Evaluation

3. While we have used the imputed rental values approach to the economic justification of the projects, it is generally agreed that this method leaves much to be desired. There are many elements in site and services projects i.e. community facilities which tend to fall outside the scope of this measure. It is also clear that net charges in imputed rental values are not easy to come by in upgraded squatter areas.

There is need for a good theoretical price on how to evaluate site and services to be followed by a practical application of recommended approaches on one or two project appraisals.

Personnel for Research

4. The economic evaluation study requires someone well versed in cost/benefit analysis with particular reference to housing. The institutional aspects require someone with a keen sense of the practical. No name readily comes to mind on the former. For the latter, Professor William Doebele at Harvard might be someone to consider.

CEMadavo:pp

OP RESEARCH

G.1065

Mr. D. Strombom April 2, 1974

Richard N. Woodford

Potential Urban Projects Research

1. As I indicated in the Division Staff meeting on Friday March 29, there are two operational matters regarding site and services and squatter upgrading projects which I feel are suitable for immediate research efforts.

2. The first is the development of supervision documentation. There could be possibly three related sub-tasks in such an applied research effort. The first would be to review the existing documentation on projects already presented to the Board or at advanced stages of preparation in relation to the general guidelines set forth in the Director's Memoranda and with anticipated supervision requirements. This might be undertaken by an experienced engineer, possibly a retired Bank public utilities engineer. A possible second task would be for such an individual to accompany an appraisal mission with the specific responsibility of specifying a supervision documentation format and assisting in the filling out of such forms. The third task would be the preparation of a complete set of formats with instructions which might have general applicability. A standardized format approach (which would be varied according to need) seems particularly desirable in view of the possible continuing use of consultant ~~agencies~~ engineers on these types of projects.

3. The second research task would be to establish the documentation necessary for management reporting to a project unit and the Bank for site and services and squatter upgrading project execution. A sequence similar to that of suggested above for supervision documentation might be followed to define a set of generally applicable reporting formats and instructions to their use. The intention here would not be to transmit such forms directly to borrowers themselves but to assist preparation and appraisal missions in formulating individualized reporting documents in cooperation with borrowers.

RNWoodford:t

OP-RESEARCH

Mr. D.A. Strombom, Transportation and Urban Projects

April 2, 1974

Donna Haldane

Research Topics

1. Per your request for research topics, I feel we have a particular gap of information on upgrading programs--both in squatter areas in the technical sense, and areas of illicit development on legally-held land. While Zambia is among our first such efforts, there appear to be potential projects in Turkey, Philippines, Pakistan and perhaps Thailand which could develop within the next few years. The majority of our research effort (such as it is) has been directed toward site and services (Merrill-Grindley, and project monitoring) or general housing policy (Doug Keare's Division.

2. Comparative case studies might be done on several projects--either government sponsored or spontaneous efforts by local communities, initiated at least five years ago. Such projects might include Lima's Pueblos Jevenos Program, the Malota Project (Zambia), Mathare Valley, Calcutta's Bustee Improvement, Kapong Improvement or the Las Colinas settlement in Bogota.

3. Attention might be focused on a limited number of practical issues which arise in project preparation and appraisal, such as:

(a) organization and management (including community organizations)--both original and revised arrangements;

(b) components: - type of infrastructure
- building materials loans
- technical assistance
- community facilities

(c) standards and costs;

(d) pricing policies;

(e) financing, collection mechanisms, (both formal and informal), default rates and methods of dealing with non-payment;

(f) land policy and tenure, implementation of actual granting of title, occupancy licenses, or leases;

(g) legislative framework

(h) attitudes on the part of government, participants and other parties involved, whether project was replicated and reasons;

(i) whether facilities were maintained and improvements continued.

4. Projects based on documented proposals might be useful to determine the typical degree of variance between anticipated and actual events. The focus however should be clearly on presenting information in a form useful in project development and not on theorizing about the subject.

DHaldane:aj

OR RESEARCH

Mr. Dinesh Bahl

April 1, 1974

Ernest Stern

Bank/IDA Annual Report

1. The attached is a draft of the section on Economic Research and Studies for inclusion in this year's Annual Report. Following your suggestion, Mr. Rao has written about a few specific research projects.

2. The paragraphs relating to the Africa Rural Development and Village Electrification studies are necessarily tentative at this stage. We expect the analysis of the data to be completed by June and we should have something to add by way of conclusions. In the meantime, we shall ask the supervisors of these research projects to provide interim conclusions based on their work.

3. Please get in touch with Mr. D. C. Rao if you have comments or if you need any additional information.

Attachment

DCRao/wg

DRAFT
DCRao:wg
3/28/74

Economic Research and Studies

(Draft for Annual Report)

In the past year there has been a modest expansion of the research program which now consists of over 80 projects, 22 of which were initiated during fiscal 1974.

A major study of Rural Development Projects in Africa has now been completed and the results will shortly be published. The study comprises a comparative evaluation of thirteen projects (including several supported by the Bank Group) in Cameroon, Ethiopia, Kenya, Malawi, Mali, Nigeria and Tanzania. Each project was carefully reviewed in collaboration with government agencies and research institutes, focusing on the efficacy of the policies and institutions in benefiting large segments of the rural population. Assimilating the individual project reviews, the authors of the study conclude that ... [await report which is expected in May/June].

An important aspect of rural development is the provision of services such as electricity. The Bank has just completed most of the work on a study attempting to develop methods of identifying and measuring social costs and benefits of village electrification, investigating the impact on agricultural and village industrial output, employment, wages and consumption patterns, social development and migration from rural to urban areas. The research is based on a broad sample of villages in

El Salvador and has taken about two years to complete in association with a team of researchers from the Catholic University of El Salvador. The results of the study are expected to have a significant impact on Bank policy in rural public utility projects--especially in determining tariff policy, the estimation of social benefits and the selection of rural electrification projects.

Another recently completed research project is the multi-level planning model for the Ivory Coast. This study (like a similar research study on Mexico which the Bank published last year */ employs a set of dynamic mathematical programs to analyze policy options for the economy, incorporating linkages between projects, sectors and the total economy, as well as between regions and between rural and urban areas. These studies have been recognized as methodological contributions in this subject and have been demonst ated to be of practical use to governments in their analysis of alternative development strategies and project choices.

One of the major ongoing research projects is the investigation of technical and economic aspects of the substitution of labour for equipment in road and civil works construction. Started in 1971, the study has so far established the technical feasibility of factor substitution for a wide range of construction activities and completed an economic analysis based on detailed field observation of road, dam and irrigation canal construction sites in India, Indonesia and Nepal. The study has concluded that the extreme labour-intensive techniques are not economically competitive with modern capital-intensive techniques and that a major emphasis

*/ Multi-level Planning: Case Studies in Mexico, by Louis Goreux and Alan S. Manne; North Holland Publishing Company, 1973.

should be placed on developing intermediate civil construction technologies. The determination of such economically optimum techniques is the subject of the next phase of this research project.

The comparative analysis of development processes across nations is handicapped by the inappropriateness of official exchange rates in making concessions to a standard unit of measurement. A major research project to develop practical methodologies to improve international comparability of national accounting aggregates is being carried out jointly with the United Nations Statistical Office and the University of Pennsylvania. The study has so far provided detailed comparison covering the countries which differ widely in income levels, nature of economic system and physical environment. The current phase of the work consists of establishing a simplified uniform framework that can be used as the basis for an expanded and continuing coverage of countries over time.

The Bank has been involved in a number of research projects that attempt to establish a basis for dealing with the problem of urban poverty. Some of them involve the improvement of the data base in a broad sample of cities. In Latin America, this is being done in collaboration with the Estudios Conjuntos Sobre Integracion Economica Latino American (ECIEL). Other projects are designed specifically to study urban labour markets. They study the relationship between labour participation rates, individual earnings and family income among households in different sectors of the urban economy.

The results of these research projects are expected to be of considerable operational use to the Bank. The principal objectives of the Bank Group's research are to broaden understanding of the development process, improve the analysis of alternative development strategies and investment choices and develop the techniques of design and evaluation of individual lending operations. The findings of research frequently form the basis of "Policy Papers" that define Bank policy on various operational issues and are then incorporated into standard Bank procedures when appropriate. To provide wider dissemination of research findings, the results of Bank research projects are usually published as "Staff Working Papers", and some as monographs or as books. A complete list of publications is available in the "World Bank Catalog" which is issued annually.

OP-RESEARCH

Mr. Ernest Stern, VPD April 1, 1974
THRU: Mr. Mahbub Haq, EPR
Bartlett Harvey, Consultant

Export Credit and Guaranty Paper.

1. Attached is a revised outline of the export credit paper with an indication of the current status, section by section. I am currently engaged in revising and filling in the country annexes which I dictated as I left each country.

2. Unfortunately the UN statistical office has now replied that while they can provide complete trade data by country, they will not do the selective program run to pull out "capital goods", that to provide anything will take one to three months, and that the cost of the data for 50 countries for 10 years would be of the order of $23,000. I could cut the number of years to bring that within the realm of the possible but the time lags involved put the UN data out of the question for this exercise. Too bad. I will have to go back to the desk economists for the latest trade data they have, as well as for comments on the annexes.

3. If I do not go to Latin America, I can do drafts of the country annexes in two weeks and get the summary section on existing export credit and guaranty institutions done in another week (4/22), leading to a completed draft report by May 1.

4. If I do visit Mexico, Colombia, Brazil and Argentina, add on three weeks, of which two for the trip. The trip is desirable for the sake of completeness and client relationships, but not in my judgment essential to the report if time is pressing. The first thing to decide on is that trip.

5. The second is the general nature of the report. I have been shaping it to be an exposure of the existing situation and of the considerations involved in the full range of alternatives from negative Bank decision to various kinds of action. It is intended as the basis for a decision in principle following which, if positive, there would need to be a technical working party to develop a concrete proposal. I now have drafts of sections I, III, IV and V and in a couple of days will have two or three draft country annexes to serve as a basis for discussion with you to see if I am headed in the right direction.

6. If you like, I can send you copies of what I have as a basis for discussion with you.

BHarvey:sld

ATTACHMENT

Export Credit and Guaranty Paper

		First Draft	
	Summery and Conclusion	Semi-done	Done
I.	The Problem		X
II.	Country Institutions		
III.	Arguments Pro & Con Bank Action		X
IV.	Institutional Alternatives for Bank Action Direct - Credit Direct - Guaranty Sponsored entity - credit Sponsored entity - guaranty		X
V.	Substantive Issues Interest rate Repayment Period Eligibility of exporters Eligibility of markets Eligibility of commodities Degree of Finance or cover Exchange Risk Imported components		X
	Annexes -		
	Korea		X
	Philippines	X	
	India	X	
	Israel	X	
	Turkey	X	
	Yugoslavia	X	
	Mexico ---------)		
	Colombia ---------) No field		
	Brazil ---------) trip yet		
	Argentina ---------)		
	Taiwan)		
	Singapore) Major, but		
	Pakistan) incomplete		
	Hong Kong) material in		
	Industrial Countries) hand.		
	International Organizations		

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

OP-RESEARCH

TO: File

DATE: April 1, 1974

FROM: O. H. Calika

SUBJECT: Study of IBRD Project Identification-Management Procedures by Vanderbilt University

Mr. John King (CPS) referred to me Messrs. Dennis A. Rondinelli, Assistant Professor of Management, and Mr. H. Raymond Radosevich, both of Graduate School of Management at the Vanderbilt University. They visited me Wednesday afternoon to discuss the above subject. They indicated that they wanted to examine the differences of approach among various lending-international aid agencies in respect of their identification, preparation and implementation of their projects. The end result of the study would be printed.

I explained to Messrs. Rondinelli and Radosevich the Bank's policies and procedures in respect of project work. Their main interest was in respect of social projects such as education, population, rural development, etc. They indicated that this would be their first meeting to obtain a general bird's-eye view of the subject which they intended to discuss further with other staff within the Bank.

cc: Mr. John King (CPS)

OHC:jsc

O-P-RESEARCH

March 29, 1974

Dr. S.K. Subramanian
Secretary
National Committee on Science
and Technology
Department of Science and Technology
Technology Bhavan
New Mehrauli Road
New Delhi - 110029
INDIA

Dear Dr. Subramanian:

It was good to see you again in New Delhi and to learn that the work of the Ministry and of the NCST is progressing. I would be glad to learn the present status of the plans we discussed for research on energy (coal, solar, etc.) and on natural resources (survey, oceanography, meteorology).

I thought that it might be of some help to you if I described the general elements of a Bank project identification for your guidance if you are considering preparation of a project proposal. Your proposal should cover:

1. A description of the task to be accomplished.

2. An analysis of the benefits which the project will bring.

3. A calculation of the costs of the project. (Investment and operating).

4. An outline of the institutional set-up needed to carry out the project and an indication that any needed institutional changes can be made.

5. A definition of the methodology of the project: who will carry out the various phases of the project, and who will use the information generated.

There should be a full discussion of these topics, which are in addition to the ones we discussed informally in Delhi. In particular, statements should be supported quantitatively whenever possible and the numbers used should be justified. I would urge you to discuss these matters at some length with Mr. Bilsel Alisbah of the Bank Delhi office as this may save considerable time in preparing a project proposal.

We look forward to receiving the materials which you are preparing on the subjects of energy and natural resources, as well as the other materials which we discussed last December.

Incidentally, Anil Roy visited us here last month to discuss work on remote sensing. His visit was punctuated by a snow-storm but nevertheless he managed to meet many of the Bank staff.

With best regards,

Sincerely yours,

CW

Charles Weiss
Science and Technology Adviser

CWeiss:lka

cleared and cc: Mr. Kraske
Mr. Golan
Mr. F. Moore

cc: Mr. Arnold
Mr. Ramachandran (GOI)

OP-RESEARCH

Mr. Clell G. Harral, Division Chief	March 28, 1974
Edward P. Holland

Back to Office and Full Report on Mission to Singapore regarding Traffic Restraint Study.

1. In accordance with my terms of reference, set out in your memo of January 21, 1974, I was in Singapore from January 30 until February 5. I participated in the mission there headed by Mr. Jaycox, and I carried out separate discussions about the study of restraint of automobile traffic, preparing a new draft terms of reference for the latter. After leaving Singapore, I went on mission to Australia and then took a few days vacation in New Zealand. I returned to the office on February 25. The mission to Australia is to be reported on in a separate memorandum. This one concerns only the Singapore traffic restraint study.

2. Plans for a system of traffic restraints are going ahead rapidly in Singapore, with the prospect that the restraints will actually be intituted later this year (possibly October).

3. In view of the immediacy of these actions, it was necessary to reorient the previously proposed study to give priority to examining the measures that are already being planned, helping work out the detailed pattern of application of those measures, and anticipating and finding means to cope with problems that may be associated with its implementation. The broader and longer-run comparison of alternatives is now, in part, treated as a second phase of the study.

4. In addition, it was recognized that the imminent institution of the restraint scheme offers an unusual opportunity for before-and-after measurements and observations that would add to the meagre stock of empirical data on trip-makers' responses to changes in price, and plans for appropriate surveys and observations were incorporated in a new Terms-of-Reference draft for the study which I completed after leaving, and mailed to Lim Leong Geok from Australia. (Copy attached). NOT ATTACHED

5. In order to benefit from the above-mentioned opportunity for empirical research it is essential that action be taken as quickly as possible to design proper surveys and carry them out before the proposed restraints are put into effect. These pre-restraint measurements are necessary as a basis to make any post-restraint measurements meaningful.

6. The design of surveys and other observations should be done by people who are expert in the statistical aspects of such matters and who are also well acquainted with the detailed structure of the urban transportation models in use in Singapore and with theories of travelers' behavior, such as might be used in modifying those models for the restraint study. Bruno Wildermuth, Pok Sheung Foo, and Lim Leong Geok, who have

worked together throughout the first phase of the Mass Transit Study, are an obvious choice on the grounds of their familiarity with the models and their previous work on surveys to calibrate them. I would propose that they play the principal role in this study -- Lim acting from his position as head of the Road Transport Working Group, Pok as head of the Mass Transit Study Team, which is waiting for instructions to proceed with work on Phase II of the M.T.S., and Wildermuth as a consultant.

7. Lim is submitting a proposal on this basis (using the Terms of Reference I drafted) to the Road Transport Action Committee, to which he reports. In line with our previous conversations with Singapore officials and with our interest in the study, I recommend that the Bank cover the foreign exchange cost for the services of Wildermuth and any other foreign consultants that are brought in with our approval. (Follow-up note: Cable from Lim, March 15, says Committee interested but has no funds allocated for study. Venkateswaran will explore further while in Singapore during week of March 25.)

8. In addition to the work of those mentioned above on the survey design, I believe it would be a good idea to bring in another individual consultant as a reviewer, primarily to look for possible flaws in the conception and statistical design of the surveys. This role, of course, would have to be filled by an outstanding expert in the design of surveys related to models of travelers' behavior. Not many such people exist, but I beleive that we have a few prospects, including David Hensher, whom I interviewed in Melbourne. (See separate memorandum on my contacts in Australia.)

9. It is important that we try to get work moving soon on the first phase of the Traffic Restraint Study, partly in order to take advantage of available staff that will later become occupied in the Mass Transit Study, Phase II, and most importantly to make sube that the necessary "before" surveys are well designed and carried out before the restraints are put into effect.

EPH
EPHolland:gbm

cc: Messrs. Jaycox
Churchill
Venkateswaran
Helmers

Attachment

Staff Notes
(R.P.O 269)

Research Committee Members March 27, 1974

D. C. Rao

Minutes of Meeting Held on March 25, 1974

Present: Messrs. Chenery, Stern, Adler, Avramovic, Balassa, Baneth, Gulhati, Karaosmanoglu, Schulmann, van der Tak, Yudelman.

1. The Committee approved the proposed extension of the research project "Growth and Income Distribution in Brazil" (RPO-269) on the basis of the understandings required by the review panel.

2. Mr. Chenery informed the Committee about the highlights of the Conference on Social Science Research on Development, held at Bellagio, Italy, in February 1974. The papers that were presented at the meeting and a summary of the discussions will be issued in the near future and distributed to Committee members. Smaller meetings of sub-groups of the research donors would be held periodically to exchange information on research priorities and projects in areas of mutual interest, explore possibilities and procedures for joint financing and attempt to compile an inventory of externally-financed ongoing research. The meetings would be held initially in Washington and perhaps later in Paris.

3. Mr. Stern informed the Committee that P&B had recommended an FY75 External Research Budget of \$2.1 million at FY74 prices. An analysis of expected proposals and the FY75 needs of ongoing projects showed that the aggregate demand for research funds would probably be over \$2.5 million in FY75. The functional profile would approximate what was forecast at the February 7th meeting of the Research Committee, except for a lower share of research in urbanization and public utilities.

4. The tentative program and assignments for the evaluation of completed projects was approved. In addition, the Highway Design Study (RPO-227) would also be reviewed at a suitable time, probably late in FY75. Mr. Chenery will issue guidelines for the conduct of these evaluations.

5. Mr. Stern informed the Committee of a request for finance from the Council For Asian Manpower Studies. Two of the five committees had submitted packages of research proposals. Since the projects were small, tackled a variety of problems, and were not supported by adequate explanatory material, they were not suitable for funding from the External Research Budget. Nor was there any basis for departing from the established policy of not providing program support for research institutions from the External Research Budget. Nevertheless, it was agreed that Mr. Chenery, with the concurrence of the Asia Region, should convey the view of the Committee to Mr. McNamara that some financial support of CAMS during its first two years is warranted. Bank support would supplement contributions from other institutions, such as Ford, Rockefeller, IDRC and USAID. The expectation is that at the end of two years CAMS would have built up its research capacity and its ability to formulate projects suitable for possible financing from the External Research Budget. The request would be for $50,000 over FY75 and FY76.

Distribution

Research Committee Members:

Messrs. H.B. Chenery (Chairman), E. Stern (Deputy Chairman),
H. Adler, D. Avramovic, B. Balassa, J. Baneth,
R. Gulhati, A. Karaosmanoglu, M. Qureshi, H. Schulmann,
H. van der Tak, M. Yudelman.

DCRao/wg

OP-RESEARCH (RPO 269)

Mr. Jorge Cauas

March 26, 1974

D. C. Rao

Growth and Income Distribution in Brazil (RPO-269)

1. The Research Committee has approved the proposal (dated March 6, 1974) for the extention of this research project, on the understandings contained in the review panel recommendations (dated March 18, 1974). The memorandum from Mr. Clark (dated March 21, 1974) satisfies the first of these understandings. The second understanding would be satisfied by a seminar based on the papers to be completed in September 1974. The third understanding, while less precise, is of considerable importance in "institutionalizing" the research in Brazil and ensuring that the results are actually used.

2. The FY75 authorization for RPO-269 is $25,000.

cc: Messrs. Ernest Stern
Peter B. Clark
Dragoslav Avramovic
Paul Smith
Mrs. Mona A. Hazzah

DCRao:wg

OP-RESEARCH

March 22, 1974

Mr. T. White
Petroleum Economics Limited
1, Argyll Street
London, W1V 2DS
ENGLAND

Dear Ted,

When you and Clive Dalton were here in February, we outlined to you our ongoing work on energy. As part of this work, we are undertaking macro-economic projections for the oil-exporting developing countries. We are distinguishing between the non-oil sector of their economies and the oil sector, and for the latter we are separating (a) crude oil extraction and (b) refining.

The projections for these two parts of the oil sector will be based on "structural coefficients" for which the exogenous assumptions are the quantity of crude oil produced, the f.o.b. market price of crude oil, and the quantity of crude oil processed in local refineries. We are presently looking at each of the OPEC member countries other than Ecuador and Gabon.

As far as refining is concerned, would it be reasonable to suppose that the "structure" would be similar in the different countries? For crude oil production, we presume that the structure would be less similar due to differences in production costs in these countries.

NOT ATTACHED

The information which we seek for our analytical framework is summarized in the attached table. As to the "current" coefficients in crude oil production, we do already have most of the information from the data already provided by you. However, we do not have explicit information on:

A. Composition of production cost

(1) Wages

(a) paid locally

(b) paid abroad

(2) Current inputs (goods and non-factor services)

(a) supplied locally

(b) imported

B. Capital requirements

C. Depreciation (investments required to maintain production)

D. The origin of investment goods (imported, deliveries from producing country, including factor services)

We have not done any work on the refining sector, apart from looking at input-output data and mining census data for the United States and European countries in order to get a general impression of the structure. We are not sure how similar this structure is in different parts of the world. We would appreciate your suggestion on the structural coefficients for the proposed large refineries which may be installed in the oil producing countries.

We should also appreciate your guidance on (a) the time period of investments required to get a new refinery on stream and (b) the likely average capacity of new refinery units. The coefficients would be of most help to us for this exercise if they were expressed in 1972 prices.

We should also appreciate any guidance which you can offer on the capital requirements, cost structure and f.o.b. prices (per barrel equivalent) of LNG schemes in these countries. This is a field that we know very little about.

We shall be using these estimates in relatively long-term projections, and we realize that we shall have to adopt uncertain assumptions and rough estimates. What we seek is the best judgement expressed in quantitative terms, so that we can at least make consistent projections which can later be adjusted when further facts come to light. In view of the schedule for preparing the energy study, we seek estimates rather quickly, i.e. preferably by early April.

We shall appreciate whatever assistance you can give us.

With best regards,

Yours sincerely,

John Foster

Attachment
cc and cleared with Messrs. Payson and Elsaas
cc: Messrs. Karaosmanoglu
Blitzer
Stoutjesdijk

O P - RESEARCH

March 21, 1974

Dr. S. P. Singh
Associate Professor
Faculty of Business Administration and
Commerce
The University of Alberta
Edmonton, Canada T6G 2G1

Dear Professor Singh:

We received your letter of February 26th, enclosing a research proposal for studying fertility determinants in India, Bangladesh, and Pakistan. Both this Division and our Population Projects Department, which is concerned with project development and lending, have studied your proposal and have reached a common view. In general the Bank is not a foundation and normally finances research outside the Bank only when it is thought to be important to our lending operations or where it has been developed in collaboration with Bank staff. Frankly in this case, I see no reason to try to making an exception. We are indeed very interested in the economic determinants of fertility, and also in the implications of some of the work that is being carried on at the RAND Corporation, but do not feel that the particular model that you have chosen - derived as it is to explain US fertility behavior - is very promising. I also see little relation between the De Tray model and the policy implications you expect. Should you ever reformulate it, please feel free to send it to us again, since some of our project lending for population does include funds for research on fertility determinants (to be allocated by the governments concerned, not ourselves) and it is therefore possible that something might be financed out of this money. However, it does not seem to me that your particular proposal would have much appeal in its present form.

Sincerely,

TK

Timothy King
Chief, Population and Human Resources Division
Development Economics Department

TK:jln

INCOMING TELEX

Steel Energy Study

LOG 107

RECEIVED OP-RESEARCH

MAR 20 9 54 AM 1974

COMMUNICATIONS SECTION

cc Mr Cash
Mr Jaffe

RCA0721/200

248423A IBRD UR

ATKINS EPSOM 23497

Distribution: Industrial Projects
Mr. Wiese
Mr. Skillings

BR/1254 20.3.74

ATTENTION: MR J W P JAFFE, INDUSTRIAL PROJECTS DEPARTMENT

RESPONDING TO YOUR LETTER OF 12TH MARCH RE STEEL ENERGY STUDY :

1. WE HAVE TEAM READY TO START WORK IMMEDIATELY ON COMMISSIONING FOR A FEE INCLUDING EXPENSES OF 4,000 DOLLARS.

2. WE HAVE CURRENTLY IN HAND A SIMILAR INHOUSE STUDY FOR THE PURPOSE OF UPDATING OUR BASIC INFORMATION FOR STEEL INDUSTRY STUDIES AND ALSO TO PROVIDE NEW MATERIAL FOR CONTRIBUTIONS TO THE FOURTH BRAZILIAN IRON AND STEEL CONGRESS AND THE ARAB IRON AND STEEL UNION CONFERENCE IN RIYAD, TO WHICH WE ARE SENDING DELEGATES.

3. OUR ESTIMATE OF THE COST OF AN INDEPENDENT STUDY TO MEET YOUR TERMS OF REFERENCE IS 6,000 DOLLARS. HOWEVER BY COMBINING THE TWO STUDIES , WE CAN EFFECT A SAVING OF 2,000 DOLLARS AS INDICATED IN PARAGRPAH 1. FURTHER, WE CAN COVER THE COST OF A VISIT BY ONE OF THE TEAM TO GATHER INFORMATION AND CONSULT WITH YOU.

4. PLEASE TELEX YOUR INSTRUCTIONS. IF GO WE WILL IMMEDIATELY ARRANGE VISIT AND INDICATE WHICH INFORMATION, ITEM 4(C) IN YOUR TERMS OF REFERENCE, IS OF SPECIAL INTEREST.

[illegible]
CC: LI INTL UNION OF OFFICIAL TRAVEL ORGANIZATION
CC: LI INTL AIR TRANSPORT ASSOCIATION
CC: OP-LIAISON
CC: OP-RESEARCH

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

OFFICE MEMORANDUM

TO: Mr. J.L. Biancarelli

DATE: March 20, 1974

FROM: A. Odone AO

SUBJECT: Energy Crisis Work Task - Collection of Economic and Tourism Data
Terms of Reference

1. On March 21 you will arrive in Paris for a stay of two days, and will proceed to Aix-en-Provence on March 23 for a stay of one day. On March 25 you will arrive in Geneva for a stay of one day.

2. The main objective of your mission will be to discuss with representatives of OECD in Paris, of "Centre d'Etudes du Tourisme" in Aix-en-Provence, and of IUOTO and IATA in Genevà, the impact of the energy crisis on international tourism demand and to collect all documentation available on the subject. You will also collect all available data concerning main economic indicators of OECD countries, as well as all relevant tourist data pertaining to European travel to the Mediterranean.

3. You will be back in Washington on March 27.

AOdone/af

cc: Messrs. Lee, Burney, Raizen, van der Tak, Tolbert, Simmons, Hayman, Bauer, Benbrahim, Renkewitz, Mrs. Calvo
Central Files
Department Files

OP-RESEARCH

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: W.S. ATKINS & PARTNERS
EPSOM

DATE: MARCH 20, 1974

CLASS OF SERVICE: TELEX

COUNTRY: BRITAIN

TEXT:
Cable No.:

ATTENTION MR. E. M. LEWIS

REURTEL MARCH 20 PLEASED TO ACCEPT YOUR OFFER TO UNDERTAKE STEEL ENERGY STUDY ON TERMS STATED IN YOUR TELEX.~~XXXXX~~ LETTER OF APPOINTMENT WILL FOLLOW. SUGGEST MARCH 25 AND 26 FOR VISIT OF ONE OF YOUR TEAM TO WASHINGTON.

REGARDS

JAFFE

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME John W.P. Jaffe

DEPT. Industrial Projects

SIGNATURE
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: JWPJaffe:bn

CLEARANCES AND COPY DISTRIBUTION:
cc & cleared with Mr. Moore
cc Messrs. Fuchs
Becher
de Zoysa

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INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

Form No. 27 (3-70)

OUTGOING WIRE

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CLASS OF SERVICE: TELEX

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JAFFE

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: John W.E. Jaffe

DEPT.: Industrial Projects

SIGNATURE: (SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: JWEJaffe:bd

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MAR 20 10 10 PM 1974
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OP-RESEARCH

L. Hartsell Cash, NDP March 19, 1974

R. Rodger, NDP

Coal-Review of Powell Duffryn's (Cons.) Study on "Coal--State of the Art"

In general, the study presents a moderately good summary of the state of coal for the non-specialist. All aspects of the industry are covered, and the appreciation of future trends is realistic. The comments listed below should be regarded as suggestions to improve the study, and they are presented with that in mind.

There are a few major items which require examination, and which would change the tone of the study. These are--the lack of emphasis on the economic aspects, and the presentation of coal resources.

There are other minor items which also merit re-examination. These have not been covered in this memo, but given more time they could be detailed.

ECONOMIC ASPECTS

The most serious fault is the lack of emphasis on the economic aspects which have influenced the industry in the past, and which will affect it in the future. The most striking example is that the price of coal prior to 1973 isn't mentioned once. Also, the prices given on p. 65 are not very meaningful.

A better comparison would be to use the price of Bunker, or Industrial oil as a basis. A doubling of the mine head price would seem to be the likely course at this time (U.S. mine head price prior to 1973 was under$5 per ton and showed a declining trend.)

Coal mining has been a stagnant or waning industry because it was unable to compete on economic terms. Oil was cheaper than coal and not merely more convenient (p. 7 and 64).

The trend to increased surface mining (p. 25) is a function of cost, not higher productivity. Surface coal mining has developed, over the years, from the use of equipment designed for other industries (e.g., earthmoving) to specialized machinery for coal mining. While capital costs are high, the lower operating costs have permitted higher stripping ratios.

The decline in underground mining (p. 26) is a function of cost, also. Underground equipment has also progressed technically. However these technological improvements have not kept pace with increasing labour and material costs. In the face of declining prices, underground mines have become marginally less profitable.

Percent recovery in underground mining of coal (p.26) is also a cost-price function. Higher prices would permit extraction of lower grade zones, or mining of isolated blocks in the vicinity of a mine. Pillars can be mined and other support used to prevent subsidence (but not at $5 a ton).

Long lead times (p. 7 & 62) are of significance only in a crisis situation. All mining projects have long lead times and, yet, production of most minerals expands to meet demand. For example, bauxite production grew at 8% per annum from 1955 to 1970, and is expected to expand at 9% from 1970 to 1980. The price has to be sufficiently high to attract the required capital. Projected higher prices for coal could provide that attraction.

COAL RESOURCES (p. 15)

While there may not be an international standard of classification for mineral resources, the paper does not help the situation. Rather than bemoan the fact, the study should define the terms used.

The term reserves is generally defined as mineral occurrences which have been measured with some degree of certainty, and are economically exploitable. The terms "measured", "indicated", and "inferred" reserves (in the U.S. "proven", "probable", and "possible") refer to the degree of certainty and are generally well understood within the mining industry. We suggest the paper clarify this point.

Since industry only proves up sufficient reserves to assure medium term production, and new discoveries are not always announced, reserve figures are often conservative.

The term resources is usually used as an indication of supplies which will ultimately be available. It is usually derived from studies of geologic and other data. Because of the nature of mineral deposits, it is difficult to translate this into economically exploitable deposits. In addition, changes in economic and other conditions will alter concepts of what are resources.

The study uses the two terms interchangeably and gives no indication of what is meant. A study of U.S. energy sources by the National Petroleum Council placed measured and indicated reserves of coal in beds over 28 inches thick and under less than 1,000 feet overburden at 394 billion tons.1/ Resources of coal in beds over 14 inches thick and under less than 30,000 feet overburden are estimated by the U.S. Geological Survey at 2,873 billion tons.2/ The figure for recoverable reserves lies

1/ U.S. Energy Outlook, An Initial Appraisal 1971-1985 Vol. II, National Petroleum Council, November 1971, p. 130.
2/ As tabulated in 1972, Keystone Coal Industry Manual, p. 432.

between these two figures. For the purposes of the study, the figure used of 684 billion tons is satisfactory; however, it would be important to define the basis for the figures.

RJRodger:kh

cc: Messrs. H. Fuchs, NDP
F. Moore, NDP
G. Becher, NDP
E. Friedmann, Public Utilities

OD-RESEARCH Central File

Mr. Mahbub ul Haq | March 19, 1974

Barlett Harvey BH

Trade Data Order for Export Credit Study.

1. I made no attempt on my field trip to gather systematic trade data, feeling that it was a task that could not be accomplished in the time available, that the attempt would interfere with more useful interviews, that data would be available in the U.S., and that in any event it had been sufficiently accomplished.

2. I now think I was correct on the first three items, but wrong on the last. I became impressed during my interviews that the SITC 7 category "Machinery and Equipment", which was used as a surrogate for "goods eligible for medium and long term export credit" in developing the quantitative projections in the paper on export credit prepared for use at Nairobi, probably yields seriously misleading results when so used. This is because on the one hand SITC 7 contains many consumer durables and electronic components which bulk large in LDC export trade and which are rarely provided even two year export credit; and on the other hand it omits a variety of engineering products, construction materials and technical equipment which may be important elements in the project financing picture.

3. On learning that the UN has detailed trade data on computer tape, I have launched on inquiry as to the cost of adjusting the annual SITC 7 export totals of the countries in question to yield a better approximation of eligible investment goods. In order to minimize costs, I have refrained from asking for a breakdown by destination, since it is possible to obtain rough indication on that score for some countries for some years from published UN trade data.

Mar 15, 1974

4. Attached is a copy of Vinod Prakesh's letter to the UN Statistical office transmitting my request, plus some further queries of his own relating to the entire export data for the countries in question and the matters covered in the penultimate paragraph of his letter.

5. If this data can be made timely available, it will substantially improve the solidity and quality of my study. If not I will need to do quite a bit of work with some of the desk economists to see if we cannot develop a better grip on the size and rate of change of relevant exports than has yet been done. The UN data should give a better, more comprehensive and more internally consistent picture than any developed by hand.

6. It will also give the Bank for the first time a reasonable basis for judging the proportionate share of relevant exports of supplier countries that is covered by Bank/IDA financing. It undoubtedly will

have other uses in the Bank, especially if the entire export data is provided.

7. Assuming that the cost of obtaining this data is not excessive, I urge you to approve its acquisition.

cc: Mr. E. Stern

BHarvey:sld

OP-RESEARCH (EDUCATION)

Mrs. Helen Hughes, Deputy Director, ECD

March 19, 1974

John Simmons and Timothy King

JS TK

Submission of Research Proposals in Education

We would like to outline two research proposals in education that will be presented to the Research Committee for the June meeting. They should be considered in the context of the presentation that will be made in the near future to the Research Committee of an educational research strategy and the work program of the education section of the DED. The proposals will be executed by two professionals and consultants.

(1) Education for agricultural productivity

Immense efforts have been made in using education to shape farmer behavior. This has included formal training at the primary, secondary and higher education levels and nonformal training with farmer extension services, mass media, and supplier salesmen. What are the most cost effective technologies? We know surprisingly little.

Past research has examined the role of formal education in micro production functions in some developing countries as well as in the adoption of innovations. The effectiveness of nonformal education has focused on adoption of innovation through extension services, while little has been done with mass media. An exception is the work by Rogers and Roy in India and Puerto Rico. As the Coombs review of the literature emphasized, neither have significant information on cost effectiveness in productivity terms.

A major thrust of future investment by the Bank in rural education will be nonformal education. Until we know more about the cost effectiveness of alternative educational technologies, then we will inadequately advise our borrowers.

The research proposal will examine the choice of alternatives for increasing the yields of one or two crops in one country. The methodology will be experimental, which means that interventions will be made to affect farmer behavior using the educational alternatives. The farmer behavior of the experimental groups will be compared to control groups.

If successful, the research should provide a simplified evaluation model that can be easily applied to other crops and country conditions. Because of the experimental nature of the project, the time required for a final report would be two years and cost $200,000.

(2) Educational Development, Growth and Equity

Few countries that are Bank borrowers are not involved in some sort of educational reforms, sometimes inspired or encouraged by the Bank. Yet many of the approved reforms that have had a chance to be tested by the passage of time have had little impact on either the nature of the education system or economic growth and social equity. For example, reforms intended to make vocational education contribute more effectively to employer and employee needs have not had that effect. Reforms intended to improve the educational opportunity and outcomes of low-income groups have often been unsuccessful.

Past research on educational reforms has tended to focus on the educational sector rather than the relation of education to growth and equity.

We would propose to study the education reform, growth and equity relationships in several countries whose reforms have had a significant effect on growth and equity. The review should provide useful guidelines for the analysis and encouragement of reform. The time required would be one year and the cost $40,000.

cc and cleared: Mr. Ravi Gulhati
JSimmons: gc

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cc and cleared: Mr. Ravi Gulhati
JSimmons:gc

OP - RESEARCH
CRPO #289

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: ROGERS
INSTITUTE ECON. POLJOPRIVREDE
POS FAH 93
BELGRADE

DATE: MARCH 18, 1974

CLASS OF SERVICE: ~~L.T.~~ IBF/RCA

COUNTRY: YUGOSLAVIA

TEXT:
Cable No.:

NOTE CABLE TO POPOVIC PROPOSING

PROCEED UNDER EXISTING CONTRACT STOP NO CHANGE REQUIRED UNLESS TOTAL PAYABLE TO BE REVISED STOP UNABLE TO DETERMINE THIS WITHOUT COST ESTIMATES FROM SOLDIERS AND AGREEMENT ON ENTERPRISE SURVEY STOP UNDERTAKE TO REWRITE CONTRACT IF AND WHEN THAT IS DESIRED STOP LETTER FOLLOWS REGARDS

DONALDSON

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME G.F. DONALDSON

DEPT. AGRICULTURE RURAL DEVELOPMENT

SIGNATURE G.F. Donaldson.
(SIGNATURE OF INDIVIDUAL ~~AUTHORIZED~~ TO APPROVE)

REFERENCE:

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OUTGOING WIRE

TO: ROGERS
INSTITUTE ECON. POLJOPRIVREDE
POB FAH 93
BELGRADE

DATE: MARCH 18, 1974

CLASS OF SERVICE: TEL.

1 BF/920

COUNTRY: YUGOSLAVIA

TEXT:
Cable No.:

NOTE CABLE TO POPOVIC PROPOSING

PROCEED UNDER EXISTING CONTRACT STOP NO CHANGE REQUIRED UNLESS

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LETTER FOLLOWS REGARDS

DONALDSON

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: G.P. DONALDSON

DEPT: AGRICULTURE RURAL DEVELOPMENT

SIGNATURE: (SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

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TO: POPOVIC
INSTITUTE ECON. POLJOPRIVREDE
POS FAH 93
BELGRADE

DATE: MARCH 18, 1974

CLASS OF SERVICE: ~~L.T.~~/ IBF/RCA

COUNTRY: YUGOSLAVIA

TEXT:
Cable No.:

PROPOSE PROCEED WITH REVISED ANALYSIS WITHOUT CHANGING CONTRACT AT THIS TIME STOP FURTHER $3000 FORWARDED TODAY STOP REQUEST PROCEED WITH ARRANGEMENTS FOR STATISTICAL ANALYSIS SOON AS POSSIBLE STOP LETTER FOLLOWS REGARDS

DONALDSON

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME G.F. DONALDSON

DEPT. AGRICULTURE RURAL DEVELOPMENT

SIGNATURE G.F. Donaldson
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

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INSTITUTE ECON. POLJOPRIVREDE
POB PAH 93
BELGRADE

DATE: MARCH 18, 1970

CLASS OF SERVICE: LT

COUNTRY: YUGOSLAVIA

TEXT:
Cable No.:

PROPOSE PROCEED WITH REVISED ANALYSIS WITHOUT CHANGING
CONTRACT AT THIS TIME STOP FURTHER $3000 FORWARDED TODAY STOP
REQUEST PROCEED WITH ARRANGEMENTS FOR STATISTICAL ANALYSIS SOON
AS POSSIBLE STOP LETTER FOLLOWS REGARDS

DONALDSON

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: G.P. DONALDSON

DEPT. AGRICULTURE RURAL DEVELOPMENT

SIGNATURE: (Signature of individual authorized to approve)

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OP-RESEARCH

(RPO 269)

Mr. D.C. Rao, DPS

March 18, 1974

Dragoslav Avramovic, Chief Economist, LACRVP Avr

Panel Review -- Growth and Income Distribution in Brazil (RPO 269)

1. Messrs. Ablasser, Ahluwalia, Yenal and myself met on March 15 to review the requested extension of the above project. Messrs. Cauas, P. Clark, D. Greene, and Prof. Taylor were also present. In addition to the project submission and related documents concerning history of the project, the Panel had before it two papers:

(a) "The Unequalizing Spiral: A First Growth Model for Belindia", by Bacha and Taylor, November 1973 (to be published in the Economic Journal), and;

(b) "Detailed Description of the Model" by Lopes and Taylor, November 1973.

2. The original schedule called for completion of the project by the end of FY74, at the aggregate cost of US$88,800.00. The proposed extension is for FY75 in the amount of $25,000.000, resulting in an aggregate project cost of $113,800.00.

3. While the Panel was impressed with the theoretical structure and quality of the first complete paper ("The Unequalizing Spiral"), it noted that the project had advanced less than was originally expected. There was a gap in documenting the state of the data base.which made it somewhat difficult to evaluate the progress of the project. The Panel also noted that the considerable emphasis on fiscal policy tools and their effects on income distribution, which was present in the initial proposal, seemed somewhat relegated to the second place in the present proposal.

4. In view of the importance of the subject, the reputation of Prof. Taylor, and the marginal nature of the proposed extension in relation to the amounts already committed, the Panel recommends that the extension be approved, on the following understandings:

(a) A list of research papers wich will result from the project should be prepared by the authors now, with indication of specific dates when they will be circulated;

(b) A presentation of quantitative results will be held at the Bank on the basis of data available not later than October 1974;

(c) The research team will maintain a continuing contact with the LAC Regional Office (Brazil Division), including cooperation with the Bank Mission in the field scheduled for the fall of 1974, so that the research results can be used by the operating staff and its continuity better assured.

Avr
DAvramovic/crs

cc: Messrs, Ablasser, Ahluwalia, Yenal, P. Clark, D. Greene, Prof. Taylor

OP-RESEARCH

Monique Cohen March 18, 1974

Douglas H. Keare, Chief ECDRB DHK [illegible] OFF.

Terms of Reference: Research on 'Urban and Regional Subsystems in Peninsular Malaysia'

You will visit the Institute of Development Studies, Brighton, England between March 27 and April 4, in order to consult with Professor H.C. Brookfield on the research project "Urban and Regional Subsystems in Peninsular Malaysia". The purpose of your mission will be to discuss a draft report of the project.

On your return to Washington you will prepare a back-to-office report.

cc and cleared: H. Hughes
cc: R. Gulhati
cc: J. English

DK:gr

OP-RESEARCH

Mr. D.C. Rao, DPS

March 18, 1974

Dragoslav Avramovic, Chief Economist, LACRVP

LAC Regional Office Research Proposal -- Strategies and Policies for Expansion of Non-traditional Exports

1. This is to notify the Research Committee that Latin America and the Caribbean Regional Office intends to submit for consideration in June a request for financing of a project which will involve preparation of papers and the holding of a conference on evaluation of strategies and policies for promotion of non-traditional exports. The proposed project will be carried out in cooperation with the Economic Commission for Latin America (ECLA).

2. The papers to be prepared would describe and evaluate various aspects of export expansion policies and programs in Latin American countries including inter alia a comparative analysis of export incentives systems for non-traditional products, export marketing channels, and the role of multinational corporations. Particular attention would be paid to the experiences of Brazil, Argentina, Mexico and Colombia which have managed to expand sybstantially such exports in recent years. These papers will focus not only on the impact of these programs from the macroeconomic or governmental viewpoint but also on their effect on decision-making at the firm level. Some of these papers would be prepared by consultants from Latin American countries drawing on their countries experience, while others would be prepared by members of the ECLA staff. The papers would be presented at a conference to be held at ECLA headquarters in Santiago, Chile, in mid-1975. The LAC staff would also make a contribution based on the country material already available. The program would be rounded out by presentation of papers by Bank staff members outlining the experience of less developed countries outside the Latin American region. These would draw on work already completed, in progress or programmed so that no significant additional Bank staff input would be required. The LAC Regional Office has been in touch with the Asia and EMENA Regional Offices and with the DPS (Development Economics Department), and we are hopeful that such contribution will be possible to prepare.

3. The total cost of the project including the conference would be approximately US$160,000 (a preliminary budget estimate is attached). NOT ATTACHED ECLA's contribution would be approximately US$111,000, the cost of its own staff input. The Bank is being asked to finance approximately US$50,000 which would cover preparation of papers by outside consultants and the costs of the conference. In addition, the Bank would be asked to pay for the expenses of those of its staff attending the Santiago meeting. We propose to undertake detailed discussions with ECLA about the number, scope and authors of the papers to be prepared, if we obtain favorable reaction of the Research Committee to this proposal.

4. The LAC Regional Office has been impressed with the need for a comprehensive review of comparative experience in promoting non-traditional exports. Particular attention needs to be paid, to the extent possible, to resource allocation effects, resource costs and financial costs of the different export incentive schemes and to the different techniques which have been used to minimize these costs while maximizing export growth. An increasing number of countries are introducing export incentive schemes, we are requested to finance investment in export-oriented industries benefiting from such schemes, and we are asked for advice concerning experiences of other countries. We hope that the proposed research project would facilitate somewhat Bank operations.

✓ - NO ATTACHMENTS

Attachments:

(a) Budget Estimate, by ECLA, March 10, 1974.
(b) ECLA, Strategy for Non-Traditional Exports, E/CN.12/967, October 8, 1973 (to be sent).

cc: Members of the Research Committee.
Mr. D. Greene

Aw
DAvramovic:DGreene/crs

Record Removal Notice

File Title	Barcode No.
Operations - Research 1972 / 1974 Correspondence - Volume 7	30045545

Document Date	Document Type
18 March, 1974	Memorandum

Correspondents / Participants
To: B. Henry de Zoysa
From: Y. Rovani

Subject / Title
Petroleum Study, Mr. B. F. Grossling Energy Task Force

Exception(s)
Personal Information

Additional Comments

The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.

Withdrawn by	Date
Sherrine M. Thompson	December 28, 2017

OP RESEARCH (EXPORT CREDIT, FACILITY STUDY)

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

1818 H Street, N.W., Washington, D. C. 20433, U.S.A.

Area Code 202 · Telephone - EXecutive 3-6360 · Cable Address - INTBAFRAD

March 15, 1974

Mr. Arthur Mullier
Chief, International Trade Center
Statistical Office
United Nations
New York, New York 10017

Dear Mr. Mullier:

Apropos of our conversation on March 12, may I request you to let us know the estimated cost and delivery time to supply us with the following trade data.

We are interested in the annual exports of 51 countries (list attached) from 1963 to the latest available year, in US thousand dollars at current prices. Our immediate interest is confined to the "capital goods" eligible for medium or long-term financing (see list). These data are needed for a paper under preparation for the IBRD's Board of Executive Directors. But if the cost of retrieving entire exports data for a country is only marginally more than for the selected categories, we would prefer to obtain data for all categories. In either case, we would like to know the cost of two summations, in addition to the retrieval of basic data by country of origin without destination for the specified categories, namely,

(i) The 51 specified countries combined into three groups as shown in the attachment;

(ii) The 31 specified SITC (Rev.) codes at three to five digit level combined into three sub-totals A, B, and C, and total = A-B+C.

I would be grateful if you could furnish the estimated cost and delivery time both for supplying data on tapes as well as in print output.

I understand that the data for the Republic of China may not be up-to-date and a time-series for the Peoples Republic of China might not be ready yet.

Am I correct in understanding that the cost of complete trade data for a DMEC is approximately $65 per year and for a LDC approximately $25 per year? Please clarify whether these costs relate to only exports or imports, or to both. May I also be informed whether you might be in a position to supply quarterly data for some 37 countries listed on page three of your three-page Summary Annex, and if yes, what would the cost be? I would be very grateful if you could arrange to send a copy of this annex to me every month.

I would like to take advantage of this opportunity to express our deep gratitude to you and the other staff members of the UN Statistical Office and New York Computing Center who have been continuously co-operating with and helping the Bank in its endeavor to assist developing countries.

With warm personal regards,

Sincerely,

Vinod P.

Vinod Prakash
Industry Division
Development Economics Department

Attachment (1)

cc:
Mr. Harvey
Mr. McPheeters

Data on Exports Eligible for Medium or
Long-term Financing Needed for IBRD

Annual export values in $000, 1963 to 1972 or latest available year

COUNTRIES

Group I: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Federal Republic of Germany, Iceland, Italy, Japan, Kuwait, Luxemberg, Netherlands, Norway, South Africa, Sweden, United Kingdom, United States.

Group II: Algeria, Argentina, Brazil, Republic of China, Colombia, Egypt, Greece, India, Indonesia, Iran, Ireland, Israel, Republic of Korea, Malaysia, Mexico, Pakistan, Philippines, Spain, Sri Lanka (Ceylon), Turkey, Yugoslavia, Hong Kong, Singapore, Portugal.

Group III: Peoples Republic of China, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, U.S.S.R.

SITC (Rev.) Categories

A.	7	Machinery and transport equipment
B.	732.1	Passenger motor vehicles, excl. buses, assembled or not
	732.6	Chassis with engine for 732.1
	732.89	Parts for motor vehicles other than for motorcycles
	732.9	Motorcyles and parts
	733.1	Bicycles and parts
	717.3	Sewing machines
	719.4	Domestic appliances, non-electrical
	719.9	Parts and accessories of machinery, n.e.s.
	724.1	TV receivers
	724.2	Radio receivers
	725	Domestic electrical equipment
	729.1	Batteries and accumulators
	729.2	Electric lamps
	729.3	Transistors, valves, etc.
	729.98	Electrical parts of machinery and appliances, n.e.s.
Sub-total B		
C.	242.4	Pitprops (mine timber)
	243.1	Railway sleepers
	661.2	Cement
	673	Iron and steel bars, rods, etc.
	676	Rails and sleepers of iron and steel
	678	Tubes, pipes and fittings of iron and steel
	691	Finished structural parts of metal

692	Metal containers for storage and transport (tanks, drums, cylinders)
693.1	Wire cables, ropes and similar articles, not insulated
698.2	Metal safes, strong boxes, etc.
812.1	Central heating apparatus
821.02	Medical furniture and parts
861.7	Medical instruments, n.e.s.
861.8	Meters and counters, non-electric
861.9	Measuring, controlling and scientific instruments, n.e.s.

Sub-total C

Each category, Sub-totals A, B and C and Total = A-B+C

D.P. Research

DISPATCHED

INCOMING CABLE

MAR 15 10 54 AM 1974

COMMUNICATIONS SECTION

LOG.56

WU1006 PWA615

SINGAPORE 51 15 1023

MARCH 15, 1974

Industrial

Mr. Jaycox
Mr. Venkatraman
Mr. Goodman
Mr. Loos

E JAYCOX

DIRECTOR TRANSPORTATION AND URBAN PROJECTS DEPT

IBRD

INTBAFRADWASHINGTON

ROAD TRANSPORT ACTION COMMITTEE EXPRESSED INTEREST IN PROPOSED

SOUDY AS OUTLINED BY E HOLLAND BUT REGRETS NO ALLOCATION OF FUNDS

FOR STUDY STOP STUDY COSTS ESTIMATED

SINGAPORE COLLARS ONE HUNDRED

THOUSAND EXCLUDING COSTS OF GOVERNMENT

STAFF PARTICIPATION STOP REGARDS

LIMLEONGGEOK

CFM IBRD REGARDS LIMLEONGGEOK

ALSO DOLLARS ONE HUNDRED

THOUSAND EXCLUDING COSTS OF GOVERNMENT

STAFF REPT

SIG LIMLEONGGEOK ALSO IBRD REGARDS

ASRECEIVED.

OP-RESEARCH

Mr. Mark Leiserson

March 15, 1974.

Dipak Mazumdar

Study of Migration in Brazil

1. I feel that the subject is an important one for a country with a great deal of ~~market~~ mobility of labor. I also agree with the point you mentioned in your discussion that a standard type of economic study of inter-state or inter-regional movement of labor will not tell us very much about the working of labor markets. What is needed is a careful study of migration flow in a selected area (or, perhaps two or three selected areas) paying attention to the migrants both at the point of destination and the point of origin. The germs of such a concept are contained in Schaefer's outline.

2. It is, however, premature for Schaefer (or any of us here) to think of the details of such a study until the broad patterns of migration in Brazil have been set out clearly, and the key areas and issues have been identified. A great deal of work has, I feel, been done on internal migration in Brazil. I can recall Sahota's study (JPE 1968) based on the 1950 census. Miss Yap's dissertation (which I have not seen) has obviously carried the story further. The ILO itself is sponsoring a study, making use of the 1970 census, by SERFHAU (a branch of the Department of Interior) in Rio de Janeiro as part of the WEP program (study 62 mentioned in the WEP brochure). At the regional level there is a survey of urban labor markets going on at the moment in the North-East jointly sponsored by the Ford and Rockefeller Foundations. I have not been able to find out as yet the exact contents of this last project, but I am almost sure it is asking questions about migration -- though only at the urban end. It is quite possible that a tie-up with this project in cooperation either with the DRC or with Christoffersen's group would prove to be a fruitful approach.

NOT ATTACHED

3. I suggest that Miss Yap be employed as a consultant during the summer to review the scene on migration patterns in Brazil, and suggest areas in which an in-depth study of the kind we have in mind would be useful. Miss Sant'Anna has already made such a suggestion to Mr. Keare (A copy of the memorandum is enclosed). I will add one comment: I think if Miss Yap has to review the work in progress at SERFHAU and the North-East (and elsewhere, for all that I know), she will probably have to visit Brazil. A suitable research proposal should come out of this review, which would be of interest to us as well as the ILO. We may even be able to retain her services for this work in the future.

Attachments:

cc: Miss A.Sant'Anna

DMazumdar:bnd.

OP-RESEARCH (NUTRITION)
Nutrition Research — General

March 14, 1974

Dr. James E. Austin
Graduate School of Business Administration
Harvard University
Soldiers Field
Boston
Mass. 02163

Dear Jim:

Thanks for your letter of March 4 and the cereal fortification study proposal.

The proposal looks tightly structured and all aspects covered seem to me worthy of attention. I have some difficulty in seeing the logical dividing lines between phases I and II other than that the first phase is largely descriptive and data gathering and the second phase will be concerned with the analysis. Logistically, this may be a good way to structure the work. But it does need to be emphasized that Phase II is absolutely essential and should closely follow Phase I. Also, the Phase I team should be thoroughly familiar with the questions which need to be analyzed in Phase II; and I would be more comfortable if the same team were involved in both phases.

I am sure that some of us have discussed the analytical issues long enough not to require a restatement. But, before going out to collect the data about the system, it might be useful to review more thoroughly than this has been done in the last paragraph of your proposal what Phase II will attempt to accomplish. Indicative of what I have in mind, it should be made explicit that basic avenues to be explored is how to maximize the number of malnourished reached and to minimize delivery to recipients not in need. This means that particular attention needs to be paid to differential pricing, and separability of markets. Somehow, somewhere it should be even mentioned that fortification should be compared with other means for cost effectiveness.

To sum up, the proposal is in good enough shape to proceed. I have an intuition that most of the data needed for Phase II will be produced by Phase I as now constituted and all the data generated will be useful. It would be good to think more explicitly ahead to Phase II while Phase I is underway. The two phases must be seen clearly as one study to be of substantial benefit.

I am looking forward to seeing your nutrition program proposals for Mexico. I have heard that you are taking an intensive look at the CONASUPO Organization. On what little I have read, this is the kind of centerpiece a rural nutrition program would have to have. I would be very interested to learn from your report how well CONASUPO performs its functions and if it isn't yet serving nutrition objectives sufficiently, how it could be made to do so.

Best regards.

Sincerely,

Shlomo Reutlinger
Development Economics Department

S.R

SReutlinger:coh

cc: Mr. A. Berg

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OP-RESEARCH

OFFICE MEMORANDUM

TO: FILES **DATE:** March 14, 1974

FROM: Gerhard Becher

SUBJECT: Energy Study: Cement Industry

I talked this morning with Mr. Hammerschmidt of The European Cement Bureau, Cembureau, 2, Rue St. Charles, Paris, France, Tel. No. 273-28-66. He promised to send me the statistical review for 1971 and 1972 covering the cement production, import-export and apparent consumption in all major countries of the world. The 1973 issue will not be available before May 1974. I also asked Mr. Hammerschmidt on the impact of increased oil prices on the production cost of cement, but he did not have much information available because his institute has great difficulties to obtain the necessary data from the various cement producers. Generally, production costs for cement seem to vary considerably between the different countries so that it would also be difficult to come to general conclusions regarding the impact of oil prices on production costs. Furthermore, cement prices seem to be controlled in many countries. The department for cement in OECD apparently is also looking into the impact of the oil prices on the situation of the cement industry. First results cannot be expected before end of April. The appropriate staff member in OECD to contact is Miss Humphrey.

GB/tms

T. OP - RESEARCH

OFFICE MEMORANDUM

TO: Files ✓

DATE: March 13, 1974

FROM: G.A. McBride GAM (Acting Division Chief, Transportation and Urban Projects)

SUBJECT: Monitoring of Sites and Services Projects

1. This is to report on the discussion that took place on Thursday, March 7 in Mr. Dunkerley's office on the above subject. Others attending the meeting were Messrs. Venkateswaran, Keare, Cohen and Ms. Long.

2. The meeting distinguished between two types of monitoring efforts being developed within the Bank/IDA:

Category I

The monitoring of sites and services projects already or being prepared by the Transportation and Urban Projects Department (TUPD). This effort will be more restrictive in scope than Category II, and will be carried out by local institutions with Bank/IDA supervision. The monitoring will be designed to meet the particular needs of each project, and will be carried out primarily to meet specific country objectives, e.g., to provide data and information for adding flexibility in implementing the projects and for aiding the preparation of future projects.

Category II

The monitoring effort being developed by the Urban and Regional Development Division (URRD), covering 3-4 site and services projects in detail, leading to an extensive analysis and comparisons of the projects, as well as further research. A December 1973 draft report by consultants (NETWORK) has been prepared entitled "Preliminary Research Design for Monitoring and Evaluation of Site and Services Projects". This report proved to be inadequate for the purpose of further specifying research design for field efforts. The URRD is proceeding on an in-house basis to refine the approach and prepare a detailed research design.

3. With regard to the former monitoring effort, the discussion centered on how best to use the already committed time of Mr. Clignet (consultant) during FY75. Mr. Clignet has been hired primarily to assist us in monitoring the Senegal Sites and Services Project but, due to delays in starting construction, it is now apparent that the socio-economic research and field observations he is to perform in Dakar cannot begin before January 1975, when site occupation is expected to start. He is therefore available to work on other projects. The meeting then discussed the following possibilities in which Mr. Clignet might be employed by the TUPD:

Cont'd. ....

(a) Tanzania and Zambia - funding for monitoring the Tanzanian project is being provided under the project, and Mr. Clignet could work with the local institutions in designing and detailing the effort to be carried out. The Zambian Government has taken the position that it would not bear any monitoring costs included in the project and, until the subject is discussed further, Mr. Clignet's possible role is uncertain;

(b) Botswana and Nicaragua - these projects are specialized cases and monitoring could probably achieve only limited objectives;

(c) Jakarta - there are already many consultants working in Indonesia and an additional consultant for monitoring might not be able to get the Government's full cooperation. Moreover, there are local and regional institutions which could assist in any monitoring effort without Mr. Clignet's services;

(d) El Salvador - there are a number of well-trained people in El Salvador who can carry out a monitoring effort without Mr. Clignet's services; and

(e) Jamaica - a sizeable monitoring effort has already been worked out with the Government and negotiated, and thus Mr. Clignet's services are not likely to be needed.

In view of these points, it was decided that, in addition to supervising the monitoring in Senegal, Mr. Clignet would initially (and primarily) be used to help design and supervise the monitoring effort for the Tanzanian (and possibly the Zambian) project, as well as help coordinate other projects (e.g., Jamaica, El Salvador, and Indonesia).

4. Mr. Cohen and Ms. Long are scheduled to visit Senegal during March 16-April 1, accompanied by Mr. Clignet. While on this mission, they will draft a work program spelling out how Mr. Clignet's time is to be used during FY1975 on a month-to-month basis. Also, Messrs. Cohen, Clignet, and Ms. Long will prepare material on:

(a) what the minimum requirements should be for future monitoring of site and services projects;

(b) how to build upon the experiences gained from the monitoring efforts described in para. 1. Category I, and develop the more extensive efforts described in Category II; and

(c) criteria and alternative schemes for sharing the costs of monitoring between the respective governments and the Bank/IDA.

The mission's full report will be used as a basis for a seminar discussion involving staff from both Departments tentatively scheduled for early May.

Cleared with and cc: Messrs. Dunkerley, Venkateswaran (Transportation and Urban)
Keare, Cohen, Ms. Long (Development Economics)

cc: Mr. D. Strombom

GAMcBride:ai

OP-RESEARCH (DEBT RELIEF

UNIVERSITY OF GLASGOW

DEPARTMENT OF
INTERNATIONAL ECONOMIC STUDIES

ADAM SMITH BUILDING

GLASGOW, W.2
Tel. 041-339 8855
EXTENSION 673/4

Thomas M. Klein, Esq.,
International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington, D.C. 20433,
U.S.A.

20th February, 1974.

Dear Dr. Klein,

Thank you for your letter of 28th January. My visit to Washington is now scheduled for the week of the 25th March and I hope I can call on you sometime on the Monday. I shall, of course, phone your Secretary to make a convenient appointment once I get to Washington. Enclosed is a brief outline of my research project, which I hope to be able to carry out. Perhaps you may care to look over it in the meantime.

Yours sincerely,

George C. Abbott.

A Brief Summary of the Proposed Research -

Debt Relief as a Form of Aid

During the Sixties the burden of debt and the need for increased aid disbursements emerged as the most urgent problems facing the developing countries. Unfortunately there also developed the tendency to regard these two problems as separate and independent issues, so that while the former increased the latter decreased, quantitatively as well as qualitatively. This was a great pity since in fact they spring from the same root cause; the need to promote the development of the recipient countries. What I am seeking to do in this research project is to devise a framework of analysis which would not only be acceptable to policy-makers, but also analytically sound, by which debt relief could be implemented as a form of aid.

What I would like to do, therefore, is to undertake further research into this problem in order to see:

a) What has been, and what is being done, at the official Inter-Governmental and International level to evaluate and/or implement this particular proposal.

b) To develop my own thoughts on the subject and to get a feel of the problem at first hand, so to speak.

c) More important though to see if I can devise a framework of analysis, which would be of some practical value to policy-makers.

d) Of more immediate interest, I would hope to be able, not only to initiate discussion on this topic, but to indicate areas which appear to be of immediate importance to the promotion of international peace and stability.

George C. Abbott,

February, 1974.

University of Glasgow.

D.P. Research

Mr. Duncan S. Ballantine, EDPDR

February 19, 1974

Andreas Tsantis, LCPED

Project Unit Study

1. We have reviewed the attachment to your memo of January 30, 1974 proposing a study of the project implementation units, mainly in education projects. Mr. Stam has contributed to the comments given below.

2. We feel that a systematic review of the Bank's experience with implementation units in education projects will be very valuable to our work. We are clearly aware, from studies by Mr. Armstrong and more recently by P and B on project supervision, that delays in establishing project units and weaknesses in their staffing, are the major causes for delays in loan/credit effectiveness and in project implementation. The proposed study should therefore provide us with details that will offer us an operational insight in improving this situation. Two questions arise: (a) what should be the study's design; and (b) how and by whom should it be carried out?

3. We agree that a questionnaire is necessary to be responded to by project officers of the regions. (In fact, in some cases, there may be a need for collaboration with project officers in other regions who had appraised the projects and/or initially supervised them, in their critical first year of implementation). Your questions, however, provided in the attachment to your memo need to be expanded and refined. We propose that answers be provided in a multiple choice setting, with space for comments if it is so deemed necessary by a project officer. Standardization of the answers will help in:

(a) reducing the amount of time required by the project officer to answer the questionnaire (estimated time requirements to respond to the proposed questionnaire are now too high);

(b) compiling the responses with a minimum error in judgment to which your proposed questionnaire is proned; and

(c) easing cross tabulation of data and rendering the questionnaire generally more productive.

4. We would, therefore, suggest that a more detailed and complete questionnaire be prepared. It should also be in a more functional form and staff should be invited to discuss it before they are asked to respond to it. I am sure we will benefit from such an interaction with the staff since they are responsible for the supervision of the projects.

5. The questions must be given in a refined format. For example, rather than obtain a hasty "yes" as a reply to question 8 in the attachment to your memo and a qualitative statement to the second part of the question, why not ask (in a multiple choice) which officers were nationals

or expatriates. Such a response could be more usefully cross tabulated with other answers in the questionnaire also properly given as multiple choices such as causes for implementation delays. Another example is question 13. The recent Kenya evaluation report states that the quantitative objectives of the project had been more or less met but not all the qualitative objectives were accomplished. There are also a host of questions that have not been included, yet need to be considered. For example, has the loan/credit paid for any salaries of the project unit staff and has that proved to be significant to project implementation; has the staff been working full time as usually stipulated in the Agreements or are we aware of moonlighting because of low salaries, etc.?

6. The orientation of the proposed study appears to be one-sided. We have drawn up a questionnaire that in most cases directly, in others by implication, we are trying to assess the Borrower's performance in implementing the projects. I think questions should also be added assessing our performance in project implementation. Have we been unnecessarily rigid in proposed time consuming procurement procedures, as the Kenya evaluation report points out for that project? Have we been unable to provide assistance to the project unit at critical points of project implementation because of lack of manpower? Did our inability to do so have any effect on project unit performance and project implementation? Such questions need to complement any questionnaire since we are not just assessing the Borrower's project unit but project management and implementation in general.

7. Following the regional data collection and tabulation on an agreed questionnaire, the question arises as to who would be responsible for the analysis of the information. Your second and third steps in the study outline section of your note leave these points unclear. We assume that you propose CPS to perform the tasks of data analysis and recommendations. However, we only partly agree with such an action because: (a) CPS does not communicate with project management units and has no direct experience of their performance; (b) such lack of experience is only partly compensated for by analyzing questionnaires; and (c) there are regional differences and characteristics underlying project implementation which may make it difficult and partly inoperative to come up with generally applicable recommendations. We, therefore feel, that it would be more productive for a CPS adviser to work with each region and discuss his and the staff's aggregate data interpretation in view of actual regional project implementation performance. Following that, it should be decided whether it is worthwhile aggregating all regions' data and deriving more general recommendations.

cc: Messrs. Thint, Stam, LCPED

ATsantis:mp

(R.C 465-15/16) OP RESEARCH (CHAP 3700) Logged Mar 21

MØRE OG ROMSDAL DISTRIKTSHØGSKOLE

POSTBOKS 308, 6401 MOLDE TLF. (072) 51 077

~~1. Mr. Holland~~
~~3. Mr. Harral~~
~~2. Yancel~~
bile: workshop urban traffic restraint.

Dr. Clell G. Harral
Chief, Transport Research Division
Transportation and Urban Projects Dept.
World Bank
1818 H. Street N.W.
Washington D.C. 2o 433, U.S.A.

Deres ref.: Vår ref.: S.H./S.R. Molde, 13th March 1974

Dear Dr. Harral,

Included is a copy of an abreviated English translation of one of the most interesting contributions from Scandinavia on road pricing. One of the authors, Mr. Bjørn Kolsrud, provided me with the copy and I'm forwarding it to you so that you can see it before the work shop starting in less than two weeks.

By the way, did my last letter reach you ? I have not yet done anything with regard to hotel reservations or flight reservations since I do not know whether to have my local travel agent do it or you arrange it. In case some correspondence has been lost in the mail, I'm including a copy of my february 14th letter to you.

called him 3/21 EPH

I would also like to draw your attention to some basic shortcomings regarding the time savings values used in the Norwegian report I forwarded to you. As a consequence of their use of too high time values the conclusions become too drastic with regard to Oslo-circumstances.

I'm expecting some papers from Denmark, but I'm competing with time. I contacted Denmark on telephone a long time ago, but things are moving slowly there it seems.

I hoping to hear from you real soon again I remain,

Yours sincerely

Stein Hansen

associate professor of transport economics.

./.

MØRE OG ROMSDAL DISTRIKTSHØGSKOLE
POSTBOKS 308, 6401 MOLDE TLF. (072) 51 077

Dr. Clell G. Harral
Chief, Transport Research Division
Transportation and Urban Projects Dept.
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Stein Hansen

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./.

TRAVEL ACTUATED CHARGING: A NEW TECHNIQUE FOR ROAD PRICING*

S. EDHOLM and B. KOLSRUD

National Road and Traffic Research Institute, Stockholm, Sweden

Metering systems

Investigations have been made in various countries in order to analyse the possibilities of reducing traffic congestion by means of road pricing. The preferred philosophy of road pricing is to use marginal social cost charges so as to render possible the optimum utilisation of road and street networks. In Great Britain, these investigations have led to practical proposals regarding technical methods. The direct methods of charging, which fall into two basic categories, viz., on-vehicle systems and off-vehicle systems, are primarily of interest in this connection. **

In off-vehicle systems, the charge is registered by a meter on the vehicle. e.g. during the period of time when the vehicle is travelling within a charging zone, or when the vehicle passes certain definite points in a street network. These systems are analogous to the calculation of the charge by means of a taximeter. They can be operated by the driver, or can be wholly automatic.

In off-vehicle systems, the charge is recorded elsewhere than on the vehicle. These systems require identification and registration of each vehicle. Such systems are analogous to telephone charging methods. In Great Britain, an automatic off-vehicle system is at present considered to be economically as well as technically most preferable.

The automatic charging methods recommended in Great Britain necessitate the installation of road-sited transmitters and cables in the carriageway. In addition to road charges, only parking charges can be levied in this way.

---

* Report presented by Mr. Kolsrud and distributed at the Symposium

** Ministry of Transport ("Smeed Panel"), Road Pricing: The Economic and Technical Possibilities, London 1964.

Automatic travel actuated charging

The British investigations dealing with on-vehicle charging systems do not include the method of automatic travel actuated charging. The use of the latter system is rendered possible by the fact that the vehicle's journey graph (i.e. the distance-time relation) in congested traffic usually exhibits characteristic differences from this relation in uncongested traffic. Some of the parameters which can indicate whether a journey has been made under congested traffic conditions or not, and which characterise the distance-time relation in this respect, can easily be recorded. Examples of such parameters are travel time or speed, acceleration, deceleration, number of stops, and stopped time.

For the calculation of the charge to be made under different traffic conditions, the travel-actuated charging method requires only on-vehicle equipment, that is to say, no road-sited equipment is necessary. The total charge in congested traffic is determined as the product of a charge per kilometre, which is dependent on the degree of congestion, and the distance travelled by the vehicle.

This method can also be used for other charges, e.g. ordinary charges per kilometre, charges for high speeds, charges for dangerous behaviour in traffic, and parking charges. Fig. 1 shows examples of charges that can be levied in various traffic situations, which are represented in this case by different speed ranges. Travelling in uncongested traffic entails a fixed charge per kilometre. For small private cars, this charge may be lower than for large ones. For lorries, the charge per kilometre can also be made dependent on other variables, e.g. the maximum permissible gross loaded weight of the vehicle. If a vehicle travelling within a high speed range exceeds a general speed limit, then the rate of charging per kilometre can be increased in order to prevent the speed limit from being exceeded. As has been mentioned above, the charge meter can also be used to collect parking charges. The rate of charging can be varied, e.g. different pricing zones. This method of collecting parking charges can replace the parking meters which are employed at the present time.

The charge meter can be equipped with a speed-recording device, which can be utilised for police supervision and enforcement. The travel-actuated charging method enables the intensity of superivsion to be increased without requiring any additional staff deployment.

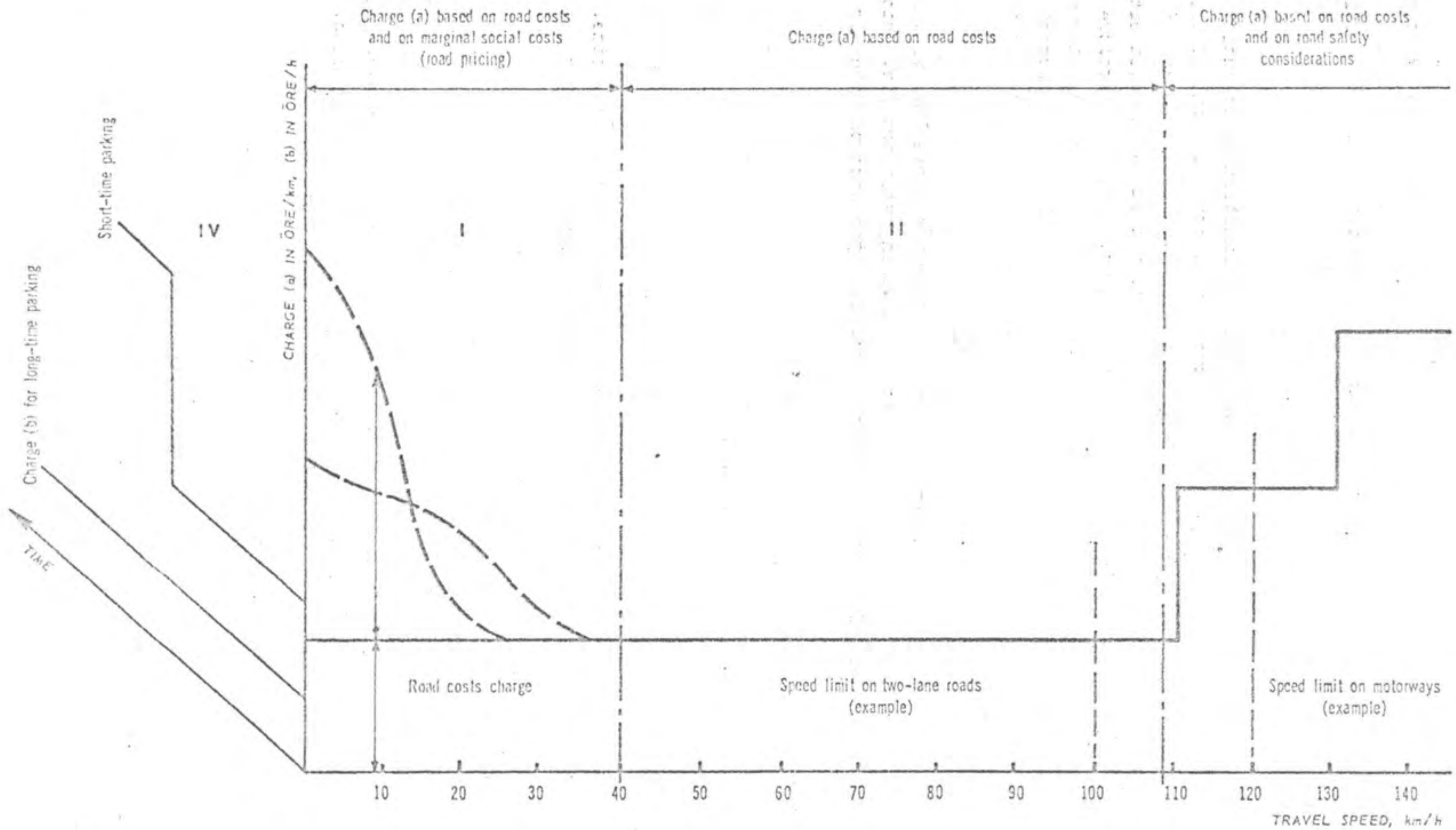
It may be inferred from the above that a device for registering charges in accordance with given instructions, e.g. when driving in platoons, when exceeding certain definite speed limits, or when parking, can be designed and constructed on the basis of known principles by using present-day engineering methods. The problem that is of practical importance in this connection is how the charges can be calculated on the sole basis of the distance-time relations for vehicles moving in platoons.

Calculation of charges

As has already been mentioned, the travel-actuated charging system presupposes

Figure 1

CALCULATION OF CHARGES IN THE TRAVEL-ACTUATED CHARGING SYSTEM



that the actual method of charging should be as close as practically possible to that which could ideally be considered correct. However, no completely irreproachable ideal charging method which might be used for road pricing in congested traffic is available at the present time. The ideal charging function presented by the Smeed Panel, and which is based on a conventional economic theory, cannot be employed at low speeds. Nevertheless, as has been shown by Jansson *, if the theoretical economic assumptions are modified, then it is possible to improve the applicability of the charging function to commuting traffic, i.e. that type of traffic which is most important from a road pricing point of view. A new ideal charging function, which is closely in agreement with the results of research obtained by Jansson, has therefore been deduced. This function can be applied within a wider speed range than the function derived by the Smeed Panel, and can therefore serve as a more appropriate theoretical basis for travel-actuated charging. On the other hand, on account of the assumption made for the deduction of the new ideal charging function, the values of the charges obtained by means of this function are too low under certain traffic conditions.

The ideal charging function given below contains two variables, viz., the travel speed under consideration and the travel speed in uncongested traffic, which serves as a reference speed, as well as a constant time value, i.e. the cost of time per unit time.

$$I = \frac{W}{V} \ln \frac{V_0}{V}$$

there

I = the ideal charge, per km, apparently
W = the cost of time per unit time,
V = the travel speed, including the stopped time,
V_0 = the travel speed, including the stopped time, in uncongested traffic.

If a vehicle is travelling in congested traffic, it is then of course impossible to continuously obtain a correct measure of the travel speed at which it would move in uncongested traffic. Therefore, in order to provide a charging function that can be used in practice, the reference speed has been put equal to the highest speed on a secondary road section, about 250 m in length, which precedes 25 primary road sections, about 10 m in length each (see Fig. 2).

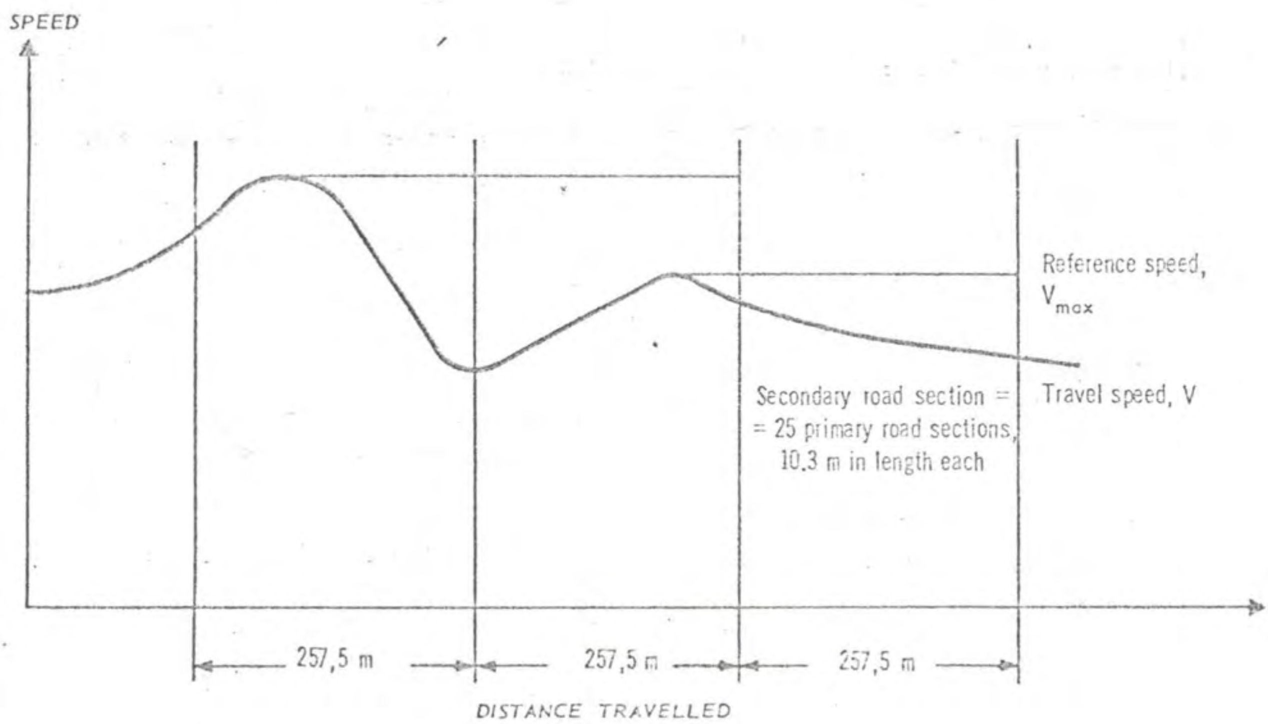
The practical charging function can then be written

$$A = \frac{W}{V} \ln \frac{V_{max}}{V} .$$

* Jan Owen Jansson: Prissättning av gatuutrymme (Road Pricing in Town), Stockholm, 1971.

Figure 2

USE OF SPEED VARIABLES V AND V_{max} FOR THE CALCULATION OF CHARGES IN THE TRAFFIC-ACTUATED CHARGING TESTS CARRIED OUT IN STOCKHOLM



There A = the practical charge

V_{max} = the maximum speed defined in the above

If V_{max} is lower than V, then A is put equal to zero.

Since V_0 has been replaced by V_{max}, no charge is made so long as the vehicle is moving at a uniform speed. Accordingly, driving at a uniform speed on a poor road is free of charge.

In order to distinguish between those charges which are due to traffic congestion, on the one hand, and those charges which are due to driving at a non-uniform speed that is caused solely by road conditions - e.g. a traffic signal - on the other hand, the practical charging function has been provided with a charging criterion. This criterion has been chosen in such a way that a charge is made only if each one of at least 10 primary road sections out of 25 consecutive primary road sections carries a charge which corresponds to a rate of at least 25 öre/km (1 Swedish krona - 100 öre).

In addition to the introduction of the charging criterion, use has also been made of another adjustment, namely, a restriction which stipulates that the charge shall not exceed 10 öre per primary road section, so that the cost of journeys in congested traffic may be estimated in a more reliable manner by the road user, and so as to preclude extremely high charges.

Test results

Data on distance-time relations recorded on punched tapes by means of a journey analyser, which had been designed and constructed by the National Swedish Road Institute, have been put at the disposal of the Institute by the City of Stockholm Highway Authority. The results of these measurements were obtained along five different routes in the Stockholm area in both directions of travel, during morning and afternoon hours, as well as during the middle of the day.

The results of the calculations of charges in a computer (for example Table 1) show certain parameters which characterise the distance-time relations, and which describe the traffic conditions in respect of congestion, viz., the travel speed, including the stopped time, the percentage of stopped time, and the number of stops. A thorough study of the table is required in order to interpret these results.

The highest average rates of charging were obtained for journeys from the city centre to Hässelby, and from the city centre to the motorway at Danderyd, during the afternoon peak hours. The mean rate was then 35 öre/km, and the total charge was slightly higher than 4 Swedish kroner for journeys to Hässelby. In the opposite direction of travel during the same hours, the average rate did not exceed 5 öre/km, that is to say, it was of the same order as the fuel tax. The heaviest peak hour traffic was of course observed in the direction from the outskirts to the centre of Stockholm in the morning, and in the

TABLE 1

Example showing detailed test results

Distance travelled from start, m S9 (M)	Time, s T9 (S)	Per cent stopped time T8/T5 (%)	Number of stops N6 (1)	Non-reduced charge, öre/km A8 (Ø/KM)	Reduced charge, öre/km B8 (Ø/KM)	Charging criterion N7 (1)	Charge, öre D8 (Ø)	Speed, in km/h 0 : 10 : 20 : 30 : 40 : 50 : 60 : 70 : 80 : 90 : 100 :	Route
–	22	–	–	–	–	–	–	XXXXXXXXXXXXXXXXXXXXXX.......	Norrtäljevägen, from the motorway Danderyds kyrka
257	302	60	12	564	246	25	63	XXX.......	
515	347	–	–	8	8	6	–	XXXXXXXXXXX.........	
772	447	45	3	152	60	16	15	XXXXXX...........	
1030	567	39	4	173	95	22	24	XXXXX..........	
1287	707	56	4	204	67	11	17	XXXX.............	
1545	756	–	–	31	31	18	8	XXXXXXXXXX.........	
1802	916	71	1	376	41	19	11	XXXX.............	
2060	964	–	–	23	23	17	6	XXXXXXXXXXX........	
2317	1114	62	1	298	50	11	13	XXXX...................	
2575	1180	31	1	72	38	14	10	XXXXXXXX............	
2832	1244	3	1	58	58	18	15	XXXXXXXX...........	
3090	1276	–	–	4	4	2	–	XXXXXXXXXXXXXXXX......	
3347	1324	2	1	26	26	13	7	XXXXXXXXXXX.....	Roslagsvägen, from Inverness
3605	1356	–	–	8	8	3	–	XXXXXXXXXXXXXXX....	
3862	1411	26	1	44	28	4	–	XXXXXXXXX........	
4120	1447	–	–	9	9	3	–	XXXXXXXXXXXXXX.......	
4377	1489	–	–	19	19	12	5	XXXXXXXXXXXX........	
4635	1534	–	–	25	25	22	6	XXXXXXXXXXX....	
4892	1561	–	–	2	2	–	–	XXXXXXXXXXXXXXXXXX.........	
5150	1580	–	–	3	3	1	–	XXXXXXXXXXXXXXXXXXXXXXXXX..	
5407	1599	–	–	1	1	–	–	XXXXXXXXXXXXXXXXXXXXXXXXXXX.	
5665	1637	18	1	39	34	7	2	XXXXXXXXXXXXXX..............	
5922	1664	–	–	14	14	14	4	XXXXXXXXXXXXXXXXXXX......	
6180	1684	–	–	3	3	–	–	XXXXXXXXXXXXXXXXXXXXXXXXXX	
6437	1710	–	–	11	11	7	–	XXXXXXXXXXXXXXXXXXX.........	

Date 17th April 1970.
Direction of travel: from the outskirts to the centre of Stockholm.
Morning traffic. Start about 07.30 o'clock.

opposite direction, away from the centre, in the afternoon. This was reflected very clearly in the high rates of charging and in the low travel speeds. These trends are summarised in Table 2.

TABLE 2

Average charges and speeds in various Stockholm areas

Area	Journeys to the centre in the morning and from the centre in the afternoon		Other journeys	
	öre/km	km/h	öre/km	km/h
Central districts	22,5	19,0	10,5	25,2
Outlying districts	23,0	20,5	5,5	36,1
Near suburbs	18,0	23,0	2,3	43,2
Remote suburbs	13,0	28,7	0,8	50,1
TOTAL:	19,0	21,5	4,3	36,4

The above-mentioned trends concur in general with our knowledge of the traffic conditions. It is to be noted, however, that average values can conceal great differences between routes in respect of the road sections where, and the period of time when, high and low rates have been observed. As has previously been pointed out, correct understanding of the travel-actuated charging method dealt with in these tests requires a detailed study of Table 1. In particular, this is necessary as regards the relation between the travel speed, which constitutes a measure of the impediments to traffic, on the one hand, and the amount of the charge, on the other hand. The reference speeds should also be taken into account in such a study.

In the outlying urban areas, the charges made for journeys in a direction opposite to that of the peak hour traffic, or during off-peak hours, are nearly always low. The travel speeds seem to indicate that the impediments to traffic under such conditions are relatively unimportant.

Further research is of course required, especially in order to reduce the risk that charges may be made in uncongested traffic.

SUMMARY OF DISCUSSIONS

In opening the session, Dr. Hitchcock described road pricing as the restraint technique which is regarded as most promising by theoretical economists and least attractive by practical policy makers. The discussion concentrated on the implementation of road pricing systems and the economic aspects involved, on the effectiveness of road pricing when compared, in particular, to other restraint measures and on aspects of

OP-RESEARCH (ENERGY)

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(3-70)

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OUTGOING WIRE

PAGE ONE

TO: W.S. ATKINS & PARTNERS
EPSOM

DATE: MARCH 12, 1974

CLASS OF SERVICE: TELEX WM

COUNTRY: BRITAIN

TEXT:
Cable No.:

ATTENTION A.R. PARISH. FULL TERMS OF REFERENCE FOR ENERGY STUDY MAILED TODAY. THE FOLLOWING EXTRACTS FROM SECTIONS 2 AND 3 SHOULD ENABLE YOU TO MAKE A START PENDING RECEIPT OF THE T.O.R.

RESEARCH TASK: BRIEFLY STATED, THE TASK IS TO EVALUATE THE EFFECTS OF THE RECENT PRICE INCREASES FOR PETROLEUM ON THE PRODUCTION COSTS, PRICES, AND SUBSTITUTION POSSIBILITIES OF SELECTED PRODUCTS IN INDUSTRY. THE TASK HAS THREE MAIN ELEMENTS:

A. TO ESTIMATE THE DIRECT AND INDIRECT EFFECTS OF THE INCREASE IN PETROLEUM PRICES ON THE PRODUCTION COSTS OF SELECTED PRODUCTS IN INDUSTRY;

B. TO EVALUATE (ROUGHLY) THE LIKELY EFFECTS ON DEMAND FOR SELECTED INDUSTRIAL PRODUCTS (i.e. IN GENERAL, WHAT IS THE ELASTICITY OF DEMAND, PARTICULARLY IN VIEW OF SUBSTITUTES THAT ARE LESS SENSITIVE TO THE INCREASE IN COST OF ENERGY AND FEEDSTOCK);

C. TO STUDY WHAT SUBSTITUTIONS AMONG SOURCES OF ENERGY AND FEEDSTOCK MIGHT BE MADE IN EXISTING PLANTS, AND WHAT CHANGES MIGHT OCCUR IN THE DESIGN OF NEW PLANTS.

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A. THE SHORT-RUN PERIOD, WHICH IS IMPORTANT FOR THE ANALYSIS OF A AND B ABOVE, IS THE NEXT TWO TO THREE YEARS. THE LONGER-RUN, DURING WHICH PROCESS SUBSTITUTIONS MAY OCCUR IS THE NEXT TEN YEARS.

B. THE NEW PRICE LEVELS ARE TO BE THOSE EXISTING DURING FEBRUARY-MARCH 1974. THE PRE-CHANGE PRICE LEVELS ARE THOSE EXISTING DURING AUGUST/SEPTEMBER 1973. THE INDUSTRIAL PROJECTS DEPARTMENT MAY BE CONSULTED ON FUEL PRICE ASSUMPTIONS. IN THE DISCUSSION OF SUBSTITUTION POSSIBILITIES, REQUIRED IN PARAGRAPHS (F) AND (G) BELOW, IT SHOULD BE SHOWN, UP TO WHICH PRICE (OR PRICE RANGE) COAL, NATURAL GAS, ETC. WOULD BE A CHEAPER SOURCE OF FUEL OR FEEDSTOCK THAN PETROLEUM AT ITS NEW PRICE.

C. THE PRODUCTS ARE SLABS, REBARS, HEAVY PLATES AND COLD-ROLLED SHEETS. THE ANALYSIS WILL BE ORGANIZED AROUND THESE PRODUCTS.

D. THE ANALYSIS SHOULD BE UNDERTAKEN FOR A "BASE CASE" WHICH REPRESENTS THE CONDITIONS IN A TYPICAL PRODUCING COUNTRY (WHICH MAY BE THE UNITED STATES, WESTERN EUROPE, JAPAN).

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TO: W.S. ATKINS & PARTNERS

DATE: MARCH 12, 1974

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HOWEVER, WHERE THE ANALYST HAS DATA AND EXPERIENCE ON THE CIRCUMSTANCES IN A SPECIFIC DEVELOPING COUNTRY (e.g. INDIA, BRAZIL, TURKEY, ETC.), THE DIFFERENCES BETWEEN THAT COUNTRY AND THE "BASE CASE" SHOULD BE EXPLAINED.

F. THE SHORT-TERM POSSIBILITIES OF INPUT SUBSTITUTION FOR EXISTING PLANTS OR PLANTS UNDER CONSTRUCTION SHOULD BE CONSIDERED:

I) DIRECT SUBSTITUTION AMONG SOURCES OF FUEL, POWER AND FEEDSTOCK;

II) INDIRECT SUBSTITUTION THROUGH USE OF LESS PETROLEUM-INTENSIVE INPUTS, (i.e. USING INPUTS WHICH THEMSELVES REQUIRE LESS PETROLEUM INPUT THAN SOME OTHER INPUT).

G. THE POSSIBILITIES OF PROCESS SUBSTITUTION DURING THE NEXT TEN YEARS SHOULD BE DISCUSSED, TAKING INTO CONSIDERATION ONLY EXISTING OR PROVEN TECHNOLOGIES. SPECIFICALLY, THE FOLLOWING POINTS SHOULD BE CONSIDERED:

I) IMPACT OF HIGHER ENERGY COSTS ON COST OF CAPITAL GOODS OF CURRENTLY USED PROCESSES;

II) DESIGN CHANGES FOR CAPITAL GOODS;

III) IMPACT OF PROCESS SUBSTITUTION ON COST OF CAPITAL GOODS;

IV) IMPACT OF PROCESS SUBSTITUTION ON UNIT COST OF OUTPUT;

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TO: M.S. ATKINS & PARTNERS

DATE: MARCH 12, 1974

CLASS OF SERVICE: DM

COUNTRY:

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V) OTHER PROBLEMS OF PROCESS SUBSTITUTION (e.g. CHANGES IN PROCESS MAY CAUSE POLLUTION PROBLEMS);

VI) SPECIAL CONSIDERATION SHOULD BE GIVEN TO POSSIBILITIES THAT PROCESS SUBSTITUTION INDUCED BY ENERGY PRICE INCREASES MAY SHIFT INVESTMENT TOWARD MORE LABOR-INTENSIVE PROCESSES.

H. THE FOLLOWING ASPECTS SHOULD BE BRIEFLY CONSIDERED REGARDING SUBSTITUTION OF OUTPUTS:

I) DEMAND ELASTICITIES FOR OUTPUT;

II) DESIGN CHANGES FOR OUTPUT.

REGARDS,

JAFFE

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AUTHORIZED BY:

NAME John W.P. Jaffe

DEPT. Industrial Projects

SIGNATURE
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: JWPJaffe:bn

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PAGE FOUR

TO: W.S. ATKINS & PARTNERS

DATE: MARCH 12, 1974

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NAME: John W.P. Jaffe

DEPT: Industrial Projects

SIGNATURE: (SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

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OP-G.O.P-ENERGY TASK FORCE
cc, OP RESEARCH (TOURISM)

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

TO: Mr. A. Hayman DATE: March 6, 1974

FROM: S. M. Tolbert SMT

SUBJ: Energy Crisis Task Force: Interviews with the Travel Trade, Europe
Terms of Reference

1. You will join me in Stockholm on March 10th, accompany me to Copenhagen on March 11th and to London on March 12th, returning to Washington on March 15th.

2. You will assist me in getting views and data from leading tour operators, airlines, and official tourist organizations on the impact of the energy crisis on international tourism, and the possible implications for projects already approved or being processed. The discussions with tour operators will be based on the same questionnaires other Department staff are using elsewhere in Europe.

3. While in London, we will review with the Economist Intelligence Unit the progress they are making in their research study on behalf of British Airways and the Bank into the impact of the energy crisis on long-haul tourism.

4. On return you will write a brief Back-to-Office report, followed by a Working Paper summarizing the conclusions of our interviews, and those of Mr. Simmons and Mr. Renkewitz in Germany, Switzerland and France.

AH:pp

cc: Messrs. Lee, Burney, Raizen, Wapenhans, Van der Tak, Ray
Tolbert, Simmons, Renkewitz, Odone, Iizuka

OP-RESEARCH (TRANSPORTATION)
CC: OP-LIAISON

March 6, 1974

Dr. J.D.G.F. Howe
University of Surrey
Department of Civil Engineering
Guildford
Surrey, U.K.

Dear Dr. Howe,

MSc. Course in Highway Engineering
for Developing Countries

I refer to the Minutes of the Inaugural Meeting of the Advisory Committee concerned with the above course, and in particular to the personal "action points" to which you drew my attention.

The first point concerned a possible collaboration between the World Bank's Economic Development Institute (EDI) and the University of Surrey in making available case history material from developing countries, and possibly in providing EDI speakers for selected topics in the University course. I have taken up the issue with Mr. Vincent Hogg, EDI Senior Lecturer in Transportation, and he is receptive to such collaboration. He will be in Europe towards the end of April and is prepared to visit the University on May 2nd, if this is convenient to you, and discuss the matter in greater detail. He would bring with him selected case history material for your perusal, and would further be prepared to address the present class of overseas highway students on a topic which you deem appropriate.

As I shall be away from the Bank for most of the months of April and May, I suggest that you correspond directly with Mr. Hogg, sending him the timetable of the course, and a brief description of the subjects covered. Some information on the present students and their background would also be useful. I would appreciate receiving a copy of your correspondence for my records.

The second point concerned highway research, and the possible collaboration of your students and/or lecturers in the actual research activities of the Bank or in discussion on the outcome of the research. I have spoken to Mr. Clell Harral, the Chief of our Transportation Research Division, whom I believe you know already, and he is interested in such collaboration. I am enclosing some literature on the Bank's transportation research activities, indicating the studies completed to date and the publications relating thereto, and also the transportation research currently in progress and proposed. As in the case of EDI activities it may be possible to arrange for a member of the Bank's Transportation research staff to address some of the University course participants on the topics mentioned. You, in turn, might be prepared to contribute something towards furthering the Bank's interest in traffic census problems in developing countries. As before, I suggest that you correspond directly with Mr. Harral on the subject, with a copy to me.

I note that the next Committee meeting is planned for June this year, and would request that consideration be given to holding it on June 7 (Friday) or June 12 (Wednesday), in order that I might combine the meeting with a PIARC meeting in Paris on June 10.

With kind regards.

Yours sincerely,

S. C. Hardy
Engineering and Procurement Adviser
Transportation and Urban Projects Department

Enclosure.
SCHardy:dfw

cc: Messrs. Churchill, Hogg, Harral, Carnemark

OD-RESEARCH (EDUCATION)

Mr. D. C. Rao

March 4, 1974

D. S. Ballantine

Advance Notice of Research Proposals

1. In accordance with your memorandum of February 13 to CPS Directors and others, I would like to give notice of my intention to submit probably two research proposals for later consideration. I shall very briefly identify the likely research topics. The figures on costs are notional.

(a) School Leaver Tracer System

2. A "Tracer System" in this case consists of a survey of school or training program graduate after they have had one or more years to establish themselves in the world of work or further training. It is the primary means of assessing the effects of school or training on the labor market performance of students or trainees.

3. We expect to use a consultant experienced in tracer studies to assist our effort to develop a "package" tracer system. A "package" will include the sample design (including control groups from the out-of-school/program population), the data collection instruments, and guidelines for the analysis and presentation of the results, on a routine basis so that tracer systems can move beyond the R or D stage to become an educational management tool. Such a standardized package would have to be adaptable to a variety of educational programs and country situations.

4. A survey of recent Bank projects in education reveals that already at least 13 countries intend to execute some form of tracer study in conjunction with their projects. Thus the development of a tracer "package" is timely. This project would complement this Department's present research effort on "Education Project Evaluation Methodology: Educational Attainments," which is concerned with the student's performance while still in school.

5. Research costs to develop the tracer "package" would include consulting fees, travel and computerized data processing. Participation by a well-chosen LDC research institute would hopefully reduce fieldwork expenses. The estimated total for the request is $30,000.

(b) School Achievement Tests and Pupil Social Background

6. This project will complement a desk study being undertaken in this Department to survey recent research on the social background correlates of academic achievement in LDC's particularly. What is required next is a survey of and experiment with the principal types of tests available to measure achievement. There is a suggestion that the type of test

administered to pupils has its own peculiar effect on pupils of more versus less privileged social backgrounds. The hypothesis goes, roughly: tests which measure the pupil's initiative or powers of intellectual discovery tend to favor the socially privileged child, while tests which measure more traditional, rote learning tend to play down the operation of the pupil's social origins in his performance. This hypothesis demands our serious attention as it touches directly on our efforts to improve the quality of education in project institutions.

7. The research project is likely to develop in two stages, with the second phase conditional on satisfactory progress in the first. The first will include a survey of the tests available in LDC's arranged along a more rote to a less rote learning scale, and a proposal for a follow-up experiment of contrasting test types in experimental conditions in an LDC. The second phase would be the experiment, where it would be possible to observe the variable effects of pupil-social background.

8. The costs of the first stage would include consultant fees, communications, and possibly travel and research assistance. Again, LDC research institute participation will be sought (at least in the second phase). The crude cost estimate would be $12,000.

JvanLMaas/rcm

OP-RESEARCH (HEALTH)

March 4, 1974

Mr. Per Lindblom
The International Federation of
Institutes for Advanced Study
Box 5344 S-102 46 Stockholm
SWEDEN

Dear Mr. Lindblom:

My apologies for the inordinate delay in replying to your letter of January 4 concerning the Awash Valley in Ethiopia as a possible site for the implementation of a schistosomiasis study.

Thank you for responding to my telex of January 10 requesting a copy of the Nobel Workshop report which arrived about a week or so later.

After reviewing the report and discussing the matter with the appropriate official concerned with agricultural development projects in that country, we can clearly lend our moral support to the study proposed by IFIAS. Clearly, if the study is at all successful, the results would be applicable to our project preparation and appraisal work, even in those cases where the IBRD may not be financing the schistosomiasis control activity.

Our observations would lead us to believe the Awash Valley as a whole,and not just the IBRD-supported project area, would be an excellent site for the study envisioned. We say that because:

- There is a broad spectrum of ecological, social, and agricultural conditions existent in the Valley;
- Communications are comparatively good; and,
- Development is still at a relatively early stage.

We will be interested to hear what further action is contemplated regarding the proposed study.

Sincerely yours,

Dr. James A.Lee
Director
Office of Environmental Affairs

cc: Mr. Haynes

JAL:on

OP-RESEARCH

Distribution below signed Mahbub ul Haq March 1, 1974

Mahbub ul Haq, Director, PP&PR Department

Policy Paper Inventory: March 1974

Attached for your information is the latest issue of the 'Inventory of Papers with Significant Policy Relevance'.

Distribution: President's Council
Department Directors, IBRD and IFC
Regional Chief Economists
Regional Program Coordinators
Mr. Qureshi (IFC)
Mr. Ljungh

INVENTORY OF PAPERS WITH SIGNIFICANT POLICY RELEVANCE UNDERWAY OR PLANNED - FY74 - 75
(As of March 1, 1974)

(Note: In cases where there are significant changes in dates since February 1, the previous schedule is shown in parentheses. Items dropped, completed or added are listed in Section III of the Inventory)

I. Policy Papers for PRC and/or Board Review

	Subject	Major Responsibility	Start	Distribution/Discussion PRC	ED s	Special Comments
General (G)						
P10G74	Bank role in financing capital goods exports from LDC's (Israeli Proposal)	DPS-EPR (Harvey)	Started	June 1974	None so far planned	Draft paper completed, follow-up work started.
P12G74	Criteria for employment of departmental forces (Force Account) in Bank-financed civil works	CPS-TRP (Jaycox)	Started	May 1974 (March 1974)	None so far planned	Discusses and establishes policy of Bank toward use of force account approach to civil works projects.
P16G74	The role of the Bank in the Energy Crisis	DPS	Started	Feb. 25, 1974	March 12, 1974	Draft sent to Mr. McNamara on February 25, 1974.
P17G74	Long term implications for developing countries and the Bank of the energy situation	DPS/CPS	Started	May 1974	June 1974	
	OTHER MANAGEMENT PAPERS[1/]					
P13G75	IBRD/IDA relending rate practice	DPS-EPR	Started	September 1974	-	The main objective of the paper is to clarify guidelines on Bank relending practice.
P14G75	Review of co-financing practices and potential	DPS-EPR	Started	September 1974	-	The paper will review the Bank's experience in associating its lending with finance from other external lending agencies.
P15G74	The proportion of project cost financed by IBRD/IDA	DPS-EPR	Started	June 1974	-	Examines the factors determining the share of total project costs that IBRD and IDA finance.
Agriculture and Rural Development (A)						
P02A74	Bank policy on financing cocoa	DPS-EPD (Yeung)	Started	December 1973	March 19, 1974	Distributed to Executive Directors February 22.
P03A74	Land reform	CPS-AGP DPS (Yudelman)	Started	March 1974	June 4, 1974	Will evaluate the role of land reform in improving the framework for accelerated agricultural production and more equitable distribution. It will incorporate results of I01A74.
P04A74	Credit to small farmers	CPS-AGP (Courbois & Koffsky)	Started	March 1974	May 28, 1974	PRC staff level review to be held March 1.
P05A75	Rural development	CPS-AGP (Yudelman)	Started	August 1974	October 29, 1974	Will look into possible new arrangements for Bank assistance to rural development projects.
P06A74	World beef prospects and Bank lending	DPS-EPD (Hunt)	Started	April 1974 (March 1974)	May 1974 (April 23, 1974)	The paper will analyse market shares, trends in world supply and demand, trade barriers and review the world outlook for beef with a view to examine future Bank lending policy for beef
Education and Human Resources (E)						
P01E75	Revision of education sector policy paper	CPS-EDP (Ballantine)	Started	May 1974	July 16, 1974	
Multi-Sector (H)						
P01H74	Environmental criteria in project evaluation	CPS-VPS (Lee)	Started	March 1974	May 21, 1974	Major issues facing the Bank in application of environmental criteria in projects.

INVENTORY OF PAPERS WITH SIGNIFICANT POLICY RELEVANCE UNDERWAY OR PLANNED - FY74 - 75
(As of March 1, 1974)

	Subject	Major Responsibility	Start	Distribution/Discussion PRC	Distribution/Discussion ED's	Special Comments
Population & Nutrition (N)						
P02N75	Revision of population sector policy paper	CPS-PNP (Baldwin)	End 1973	June 1974	None so far planned	The need for this paper will be reconsidered after review of the Population "White Paper" being prepared by PHR Division.
P03N75	Bank Group activities in the field of health	DPS-ECD (King) CPS-PNP (Kanagaratnam)	September 1973	September 1974	December 10, 1974	First draft being reviewed.
Power (P)						
P01P74	The Bank s role in financing nuclear power development	CPS-PBP (Friedmann)	January 1974	March 1974	May 14, 1974	First draft completed.
P02P74	Lending for village electrification	CPS-PBP (Anderson)	January 1974	June 1974	None so far planned	Objectives and special problems associated with lending in the sector. Will rely on results of on-going research study.
P03P74	Economic evaluation of public utility projects	CPS-PBP (Anderson)	June 1973	April 1974 (March 1974)	None so far planned	First draft being revised.
Urbanization (U)						
P01U74	Bank approach to sites and services projects	CPS-UBP (Jaycox)	May 1973	March 1974	May 7, 1974	Scope and timing of the sites and services paper is linked with the progress of the housing paper, a first draft of which has been completed and is being revised.
P03U74	Review of housing sector and housing requirements	DPS-ECD (Keare)	Started	March 1974	May 7, 1974	
P02U74	Bank policy in urban transport	CPS-UBP (Jaycox)	Started	July 1974	Nov. 5, 1974	Timing of this paper under review
Water (W)						
P01W74	Lending for village water supply	CPS-PBP (Shipman)	April 1973	April 1974 (March 1974)	None so far planned	Objectives and special problems associated with lending in the sector.

II. Issues Papers[2]

	Subject	Major Responsibility	Start	Final Draft	Special Comments
General (G)					
I02G74	Bank Group role in developing financial systems of LDCs	IFC (Gill) & DPS-ECD (Yenal)	Started	March 1974	New outline of principal issues has been prepared by ECD.
I03G74	Cost recovery & pricing of public services	CPS-VPS (Ray)	Started	May 1974	Will review conflicting policies and recommend more general standards.
I04G74	Development strategies in semi-industrial countries	DPS-DRC (Balassa)	Started	June 1974	Effects of alternative policies on economic growth.
I06G74	Public works as a policy instrument	DPS-ECD (Hofmeister)	February 1974	June 1974	Identification of circumstances in which public works programs can be used for reducing unemployment.
I08G75	Civil works design criteria	CPS-TRP (Jaycox)	Research on-going	August 1974	Board seminar held on July 17, 24, 1973 on preliminary findings.

INVENTORY OF PAPERS WITH SIGNIFICANT POLICY RELEVANCE UNDERWAY OR PLANNED - FY74 - 75
(As of March 1, 1974)

	Subject	Major Responsibility	Start	Final Draft	Special Comments
Agriculture and Rural Development (A)					
102A74	Issues in the formulation and appraisal of rural development projects	DPS-ECD (Krishna)	January 1974	May 1974	Title changed from "African Rural Development" since paper will also incorporate Asian experience.
103A75	On-farm mechanization issues paper	CPS-AGP (Duane)	September 1973	September 1974	Examines, inter alia, costs, benefits and employment effects. Uses results of India and Pakistan research study. Will be followed by policy paper.
104A74	Irrigation water charges issues paper	CPS-AGP (Duane)	Started	February 1974	Draft being reviewed. Likely to be followed up by policy paper.
DFC (D)					
101D74	Criteria for economic appraisal of DFC sub-projects	CPS-DFC (Wood)	Started	March 1974	Draft paper on economic criteria distributed to selected DFCs in August/September. DFCD will finalize after 6-month trial period
102D74	Criteria for Bank support of public DFCs	CPS-DFC (Loeschner)	Started	May 1974	Will carry forward work of Professor Mason.
Multi-Sector (M)					
101M74	Economic analysis of projects	CPS-VPS (van der Tak)	Started	July 1973	Both papers to provide a Bank-wide methodology. Possible important policy implications. Drafts under review. Regions undertaking pilot studies of estimation of shadow prices. Final edition scheduled for May 1974.
102M74	Measurement of shadow prices	CPS-VPS (van der Tak)	Started		
Industry (I)					
104I74	Selected issues in Bank Group assistance to industry	CPS-NDP (Moore & Thadani)	Started	September 1974 (May 1974)	Part I will look into comparative merits of direct financing, DFCs, IFC, other sources; Part II will examine the appropriate share and timing of Bank Group assistance to industry.
107I75	Industrial policies and economic integration in Western Africa	DPS-DRC (Balassa)	Started	April 1975	Will analyse possible policy options
108I74	Fertilizer production and policy	IFC (Qureshi)	Started	March 1974 (Feb. 1974)	The paper deals with long range projections, investment strategy in borrowing countries, trade issues and regional aspects of production and consumption of fertilizer. Preliminary draft has been prepared.
109I74	United Nations Natural Resources Exploration Fund	CPS-NDP (Bosson, Cash)	Started	June 1974	Administrative and operational aspects of the Fund, approved by the General Assembly, including possible Bank participation.
Population and Nutrition (N)					
101N75	Issues in family planning	DPS-ECD (King)	Started	May 1974 (December 1974)	Identification of policy variables which exercise critical impact on effectiveness of family planning program.
Tourism (Q)					
101Q74	Terms of lending for tourism (Part I)	CPS-TMP (Christie)	Started	March 1974 (January 1974)	Will examine typical hotel projects to determine appropriate lending terms.
102Q74	Economics of special fiscal and other incentives for tourism investment and operations	CPS-TMP (Odone)	Started	July 1974	Review of tourism incentives in Tunisia with results to be applied elsewhere.

INVENTORY OF PAPERS WITH SIGNIFICANT POLICY RELEVANCE UNDERWAY OR PLANNED - FY74 - 75
(As of March 1, 1974)

	Subject	Major Responsibility	Start	Final Draft	Special Comments
Transportation (T)					
101T74	Highway sector lending	CPS-TRP (Jaycox)	Started	January 1975 (October 1974)	Studies case for sector rather than project lending for highway development.
102T75	Lending for railways	CPS-TRP (Jaycox)	Started	February 1975 (August 1974)	Will examine major problems in RR lending and proposed ways of handling them.

III. Items Dropped, Completed or added

103E74	Non-formal Education	Completed	
109I74	United Nations Natural Resources Exploration Fund	Added	To explore possible Bank participation.

1/ Papers prepared for Management in the first instance, which may not go for PRC.
2/ Some of these papers would be distributed to the PRC and Executive Directors for information.

Policy Planning & Program Review Department
March 1, 1974

OP. - RESEARCH

Mr. D. C. Rao | March 1, 1974

Gilbert T. Brown

Pakistan Research Proposal

As per our conversation, attached is a brief outline of a research proposal which the Asia Region will put forward as an External Research Program proposal within the next several weeks (before your April 20 deadline). We feel that the issues to be researched are of great importance in all developing countries, and that Pakistan is an expecially attractive candidate for a case study of these issues.

In terms of resources required, I would estimate 12 man months of non-Pakistani consultant time, 24 man months of DPS staff time, and 24 to 30 man months of Pakistani consultant time. Tradeoffs might be made between these groups, depending upon the individuals available and comparative costs. The region would also commit manpower. An illustrative breakdown of outside consultant time might be as follows:

Henry Bruton (if available):	4 to 6 months to help design both overall research structure and specific topic studies and help in all subsequent phases of the study.
Edward Shaw (if available):	2 months to advise on economic policy issues and conversion of economic research findings into economic policy proposals.
Other non-Pakistani consultants:	4 to 6 months to utilize experience on these issues in Pakistan of other experts. These might include Walter Falcon or Carl Gotsch (agricultural pricing policies); Stephen Lewis, Joseph Stern or G. C. Hufbauer (effective protection of imports and taxation and restriction of exports); Alan Tait (taxation and subsides); and Ralph Turvey (government enterprise and other product pricing.
Pakistani Consultants:	as available.

As for DPS staff, Ralph Hofmeister of the Population and Human Resources division has done considerable work on employment and income distribution in Pakistan in the past year and a half, and Kenan Bulutoglu of the Public Finance Division is now preparing a paper on public sector savings in Pakistan. Charles Weiss has recently examined technological institutions and technology problems in Pakistan. The work of the first two particularly, but also that of Weiss, relates to pricing policy issues that would be part of the proposed research. Thus part of the research has been done, but some of their work needs to be carried further.

The research proposal has been discussed in a preliminary fashion with the above and with several other DPS staff including Montek Ahluwalia and Ramgopal Agarwala, who have expressed interest in it.

The next task is to design the research in greater detail, including narrowing it to manageable proportions within available resource limits, and then to consider further the personnel requirements.

Attachment

cc: Messrs.
J. Baneth
H. Pilvin
J. H. Collier
E. Stern
M. Haq
R. Gulhati
W. Tims
O. Yenal
T. King
J. Cauas
S. Please
J. Cauas
J. Duloy
R. Hofmeister
K. Bulutoglu
C. Weiss
N. Carter
M. Ahluwalia
R. Agarwala

GTBrown/dc GB

Proposal For Pricing Policy Research In Pakistan

The Proposal

1. Government pricing policies, broadly defined to include interest rates, exchange rates, trade policies and rationing and allocation schemes, are a high-priority topic for research and analysis in Pakistan. The most important policies to be analyzed, in order of their probable economic priority for Pakistan, appear to be:

- agricultural input and product pricing
- taxation and subsidies (including export duties)
- government enterprise pricing
- tariffs and trade restrictions

2. While some narrowing of scope may be necessary to limit the size of the project, it would be desireable to evaluate the effect of these policies on:

- resource allocation (including industrial structure, agricultural cropping patterns and inter-sectoral terms of trade)
- employment
- income distribution
- public and private saving
- capital-labor substitution and capacity utilization
- GDP
- trade

3. Other price and allocation policies will also, of course, influence the suggested dependent variables. These policies include:

- investment controls
- interest rate and credit policies
- foreign credit and investment policies
- wage policy

However, these policies appear to be causing fewer economic difficulties at present than are the four mentioned in the first paragraph. Therefore, in order to limit the scope of the research proposal to manageable proposals, it is suggested that the influence of this second group of policies be considered only to the extent necessary to evaluate the effects of the four priority policies.

Significiance

4. While directed toward priority issues in Pakistan, the study would deal with widely debated questions concerning the relationship of price policies to income distribution, employment and development. There are sharp differences in the Bank and in the economics profession on the importance of price policies in economic development. Those who stress the

importance of prices talk about successful growth and changes in macro quantities which have followed changes in relative prices in particular countries, but are generally not able to answer questions about product and input price elasticities and employment and income distribution linkages to the satisfaction of the skeptics, and may not adequately consider the importance of concurrent institutional changes such as in government investment or support programs. Those who stress the importance of institutional factors and/or centrally planned investment, on the other hand, tend to ignore the influence that relative prices and price changes may have in bringing about changes in the structure and size of investment programs, the productivity and organization of agriculture, or in other areas.

5. Pakistan is an unusually attractive candidate for a case study from which hypotheses could be drawn for testing in other countries. While the primary focus should be on the consequences of current pricing policies, there is also a valuable historical base in the substantial literature on Pakistani pricing policies in the 1960's, including many contributions from Pakistani and foreign economists then associated with the Pakistan Institute for Development Economics. These earlier studies, including government documents, could be used both for historical analysis and for understanding current economic structure, policies and issues. Pricing policies and relative prices have also changed sufficiently over time to give a basis for quantitative analysis.

6. Price distortions appear to have greatly increased the skewness of income distribution in Pakistan. Multiple exchange rate and import restrictions, for example, favored a small group of manufactures and traders at the expense of farmers and consumers. Interest rates and credit policies gave great subsidies to a few and minimized the return on savings to low income groups. Mechanization and the "green revolution" was subsidized for large farmers but not for small. Support for industry increasingly benefitted a small group of wealthy families, and encouraged use of capital-intensive imported equipment. Even though manufacturing accounts for more than 15 percent of GDP, total employment in registered factories (those employing more than 10 persons) is less than the annual increase in the labor force.

Methodology

7. The establishment of a small group (perhaps 4 persons) to design such a study for Pakistan would appear to be the first step. They would be charged with defining more specifically the aims of the research, the most appropriate research techniques, identification of research personnel, and establishment of a timetable. The research should be a collaborative effort involving Islamabad University and the Pakistan Institute for Development Economics, although the amount of time and talent they could provide would be limited because of competing demands from the government, which is now beginning work on the Fifth Five Year Plan (to be completed in draft in early 1975). Response to informal discussion suggests that the government would approve our research, but would give it secondary priority to their own identified needs for preparing the Plan.

8. As now visualized the research would proceed simultaneously on two fronts. One would be the preparation of the framework of a mathematical model, perhaps similar to that prepared for the Kenya Basic Report, indicating the elasticities and linkages to be studied, and tying together the micro and macro aspects. In conjunction with this, however, four studies covering each of the four major policies to be studied would also be designed. These four studies would seek to provide the data needed for the model, but would not be limited to the requirements of the model. Thus they would cover as wide a range of relevant material as possible.

9. The final output of the research would thus be four integrated studies covering the four key price policy areas indicated above (and possibly one or more shorter papers on other policy areas) plus a comprehensive model to analyze pricing policy issues. Those for whom the model building exercise seems dubious would be assured of the output of the four major studies. Those studies will surely be improved by the discipline of trying to satisfy the needs of the model, while not being limited to those needs. The value of the model will be enhanced by the additional material and analysis in the four studies.

OP-RESEARCH

Mr. Ernest Stern

March 1, 1974

Mahbub ul Haq signed Mahbub ul Haq

New Study on OPEC-Type Alliances

Attached is a preliminary outline for a study on the "Feasibility and Role of OPEC-Type Alliances in Raw Materials", prepared by Mr. Varon. We sent the outline to Messrs Tims and Singh but we have not received their comments yet. Let us discuss when you are ready.

Attachment

cc: Messrs Tims
Singh
Varon

BVaron:mjs

FEASIBILITY AND ROLE OF OPEC-TYPE ALLIANCES IN RAW MATERIALS

Preliminary Outline

Background and Objective

The success of petroleum-exporting countries in raising their oil prices and revenues through concerted action since 1971 (the so-called OPEC action) has raised the question "Can developing countries dominating the supply of other primary commodities achieve a result similar to that of the OPEC-member countries?" The Bank has formulated brief answers to this question in two interim papers: one dealing with non-fuel minerals (February 1972), the other with agricultural commodities (March 1973). The continuing success of oil-exporting countries -- especially the unilateral price adjustments announced since October 1973 and their far-reaching long-term implications -- has hightened the existing interest in the feasibility of other cartels. It has enhanced, at least in principle, the appeal of the OPEC model to exporters of other primary commodities, and, at the same time, intensified the concern of oil-importing countries over other alliances of this type.

While the current interest in the feasibility of OPEC-type action embraces all primary commodities, it is especially great with regard to non-renewable resources, such as mineral raw materials, in view of mounting concern over the depletability of such resources (and associated questions of optimal pricing, rate of exploitation, etc.), their indispensability for industrial production, and their propensity to polarize the developed countries and the LDCs. (In many non-renewable resources, as in oil, developing countries export most of their output and developed countries, as a group, import most of their requirements. This radical division -- compared to the situation in, say, grains -- creates a potential for confrontation.)

The purpose of the proposed study is to review the feasibility and possible role of producers' alliances in basic raw materials (non-fuel minerals, rubber, forest products, etc.)1/ by updating and expanding the existing analysis and by looking at the general economic setting from the latest vantage point. The need for updating stems from the changed market situation for raw materials since late 1971 (the market was bearish then) and from the need to work into the analysis the impact of higher energy costs on: (a) the demand, supply and price outlook for the major raw materials, (b) the economic and financial prospects of the major trading countries, (c) the availability of surplus oil funds for investment in, or lending to, raw material producing LDCs, and (d) the economic and political climate for producers' alliances. The expansion of the existing analysis will involve undertaking, *inter alia*, a more detailed analysis of the market structure (the mutual interdependence of individual exporters and importers, the existence of covert buyers' cartels, the role of multi-national corporations, etc.) with a view to arriving at a better assessment of bargaining power and, specifically, the prospects for raising revenues through "price leadership." (Morocco, a major supplier of phosphate rock to Western Europe, raised its

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1/ The justification for limiting the coverage to raw materials (other than the fact that this is, in my view, the group of most urgent interest) is the desirability of allowing time to focus on the feasibility of OPEC-type alliances and their implications in a country context, as I shall explain. Broadening the coverage to all primary commodities would broaden the country coverage so widely that attention to country context would have to be sacrificed.

phosphate prices unilaterally by a factor of three last October; its additional revenues are anticipated to offset its higher oil-import costs.)

A new feature of the new study will be its attempt to look at the problem in a country context; i.e., greater attention will be paid to the identity, general economic outlook and motivation of the potential members of producers' alliances; the identity, options and added cost' of the major importing countries, etc. While the bulk of the analysis will be based on a commodity by commodity approach, its conclusions will be directed to the question "What is the general economic outlook for raw material exporting LDCs in the post-OPEC era and what role can producers' alliances play in modifying this outlook?"

Contents

/The following is not a complete itemized list of contents; it is designed to illustrate the proposed organization of the paper and to highlight the items to be given special consideration in comparison with the earlier investigations./

I. BACKGROUND AND PURPOSE OF THE STUDY

The reasons for OPEC's success, which generated the proposed paper's concern, have been hinted in bits and pieces in various papers but have never been presented in an analytical yet concise way. It may be useful to do so here.

II. DEVELOPING COUNTRIES' PARTICIPATION IN RAW MATERIALS MARKETS

Raw materials of export interest to LDC's; share of reserves, production, exports; their dependence on such exports and the employment generated. Major end-users of the raw materials and the industries generating the demand. Major importers and their changing import dependence. The pattern of trade.

III. DEMAND, SUPPLY AND PRICE OUTLOOK

Special attention to whether or not meeting the projected demand requires investment in new capacity, the sources of such investment, the "time lag" , joint-product relationships, etc.

IV. FEASIBILITY OF PRODUCERS' ALLIANCES

A fresh look at the preconditions for such action; greater attention to exporting countries' ability to withhold supplies; clearer distinction between short-run and long-run price elasticities; greater documentation of the obstacles posed by substitution, accelerated recycling and variations in product characteristics (ore grade); the necessary" membership of a successful cartel for each commodity.

V. PROSPECTS FOR OTHER FORMS OF UNILATERAL ACTION

Price leadership; increased processing.

VI. QUANTIFICATION OF POTENTIAL REWARDS

Rough estimates of the additional foreign exchange revenues which can be obtained through unilateral action; their contribution to the resources of individual countries; the distribution of the added cost.

BVaron:fvf
February 20, 1974

OP- PUBLIC UTILITIES
cc- OP- RESEARCH

PUBLIC UTILITIES DEPARTMENT

DOCUMENTS INDEX

March 1, 1974

Prepared by: Phyllis Peter

O.P. Research

March 1, 1974

Mr. R. F. Pierce
Senior Research Consultant
Development & Planning Division
The Economist Intelligence Unit Limited
Spencer House
27 St. James's Place
London
SW1A 1 NT
ENGLAND

Dear Mr. Pierce:

Tourism and Energy Prices - Research

You will now have received our telex asking you to start work on our behalf, and a formal letter of appointment is being processed.

I enclose some rough working papers on income and price projections. Under no circumstances should these be regarded as any "official" Bank position, nor should they be quoted to outsiders. Nevertheless, we would appreciate your letting us know promptly if your own assumptions are likely to differ very widely from these hypotheses.

Mr. Tolbert and I hope there may be a chance to meet you during our visit to London on March 13th and 14th, and see how the study is getting on.

Sincerely yours,

AH.

Andrew Hayman
Tourism Projects Department

AH:pp (Consultants)
(Energy Crisis)

Cleared in substance with & cc: Mr. Tims

cc & cw: Mr. Tolbert

Internal Working Paper
(not to be quoted)

ANNEX 1

INITIAL WORKING HYPOTHESIS: JANUARY 1974

INTRODUCTION

The following scenarios are built from the starting point of alternative supply and price projections of crude oil, tracing those through the demand side -- principally the industrialised countries -- to obtain a set of possible growth paths of the economies of those countries. Implications for inflation rates and trade with the developing countries are gauged and an attempt is made to estimate the possible implications for the prices of primary products exported by developing countries.

I. PROJECTED MARKET PRICE OF PETROLEUM
(US$ per barrel)

January 1	Low	Medium	High
1974	8.00	8.00	8.00
1975	8.40	8.65	8.88
1976	8.74	9.27	9.76
1977	9.04	9.88	10.68
1978	9.36	10.53	11.68
1979	9.69	11.23	12.78
1980	10.00	12.00	14.00
Average Annual Increase 1973-1980:			
Nominal	3.8	6.9	9.7
International Inflation	4.7	5.7	6.7
Real	-0.9	1.1	2.8

Comments: The low petroleum-price series assumes the same supplies as in "Petroleum Prices" (SecM 73-769), Table 1b, which projects a compound annual growth rate of 4.7% for 1976-1980 and an approximate 7% increase in both 1974 and 1975. The "low" projection assumes international inflation of about 4.7 %; the high petroleum-price series assumes higher inflation and significantly more restricted oil supplies (see Item II). As any number of forces could interact with the high-low range, the medium petroleum-price series is the one which should be used.

II. ALTERNATIVE PROJECTIONS OF OIL SUPPLIES
(million barrels)

	1974	1975	1980	1975-1980 Annual Growth (percent)
From all OPEC:				
low:	11,000	11,700	13,270	2.6
high 1/	11,330	12,210	15,490	4.7
Availability to DC's 2/				
low:	9,900	10,600	12,100	2.7
high:	10,200	11,000	14,000	4.9
mid-point:	10,050	10,800	13,050	3.9

1/ As in "Petroleum Prices" (SecM 73-769)
2/ Approximately 90 percent of total.

III. GNP DEFLATORS AND INTERNATIONAL PRICES (DC's)

	GNP Deflators	International Prices
	(annual percent change) US dollars)	
1974	9.4	8.3
1975	8.0	6.6
1976-80	6.8	5.2
1973-80	7.2	5.7

Comments: These GNP deflators are the mid-point of a high-low range; the range varies slightly from +12-15 percent, being greater in the early years. The "low" corresponds closely to the international inflation rates projected by EAPD last August-September; the "high" is an equivalent amount above the mid-point shown. The corresponding international-price increases are derived based on historical relationships between GNP deflators and those prices. These projected price changes are to be used in all relevant projections until further notice; see Table 1.

IV. ALTERNATIVE PROJECTIONS OF REAL GROWTH OF DEVELOPED REGIONS
(percent per annum)

	U.S.-Canada		Japan-Oceania		Europe	
1972 (OECD)	6.0		9.0		4.0	
1973 (OECD), adjusted for recent events)	6.0		10.0		5.0	
	A	B	A	B	A	B
Projections:						
1974 /1	1.5	2.3	3.0	4.0	0.5	2.0
1975	2.5	3.5	5.0	6.0	1.5	2.5
1976-80	3.5	6.0	7.5	7.0	3.0	5.5
1973-80	3.1	5.1	6.5	5.4	2.4	4.6

/1 OECD projections (November 1973) except in 1974 about 2.5 percent growth in U.S.-Canada; about 7 percent in Japan-Oceania and 4.5 in Europe.

Comments:

1. Projection "A" envisages an enduring impact of the present oil situation. The form of that impact could vary -- for example, slow growth could result from failure to adapt the economies and continued uncertainty about energy supplies, or it could derive from the process of adaptation itself, given the character of the structural changes required.

Underlying this view is the assumption that a relatively lesser degree of supply restriction prevails in oil, and that the "low" price (and international inflation) projections in Item III will occur. There is thus less impetus for energy conservation and structural adjustment.

2. Projection "B" describes a more rapid recovery, stimulated by the intensity of structural change and energy-conserving activity; annual growth is faster than the historical average in 1976-80 -- except in Japan, where changes already approved are of major proportions and are expected to slow economic growth.

3. For most purposes it should suffice for the time being to have the range of growth estimates of industrialised countries. However, if a specific figure is necessary, the midpoint of Projection "A" and "B" should be used.

V. VOLUME GROWTH OF LDC EXPORTS: 1973-80
(percent per annum)

Developing Country Groups	Real GNP Growth of Developed Regions: "Low" (A)	"Middle"	"High"(B)
Oil	4.9	5.8	7.7
High-Income	4.4	5.2	6.7
Middle-Income	3.9	4.6	5.9
Low-Income	4.2	4.9	6.4

Comments: The alternatives for GNP growth in the developed regions presented here correspond directly to those shown in Item IV; the "middle" projection here corresponds to the mid-point of the A and B real growth projections. The commodity composition assumed for LDCs exports is that observed in the 1967-69 base period, with some adjustment for the changing share of manufactured goods in the high-income countries' exports.

VI.. REVISED COMMODITY PRICE FORECASTS.

Tables are attached showing price projections for major primary commodities and for some manufactured products which are of importance as imports of developing countries. See Tables 2-4 and accompanying charts.

VII. EXCHANGE RATES

The exchange rates assumed here are the same as those implicit in the August-September international inflation projections; these are in fact very close to the rates prevailing at end-1973, though they may differ from average 1973 rates. For the present, we assume no change in the exchange rates.

VIII. AID FLOWS

It is assumed that disbursements in 1974 and 1975 will be unchanged from present projections. There has as yet been no attempt to estimate changes in commitments for any part of the projection period.

Corrected 1/14/74

Table 1

INDEX OF INTERNATIONAL PRICES

	Low	Medium (1973=100)	High	Low	Medium (1967-69=100)	High
1967	72.8	72.8	72.8	99.6	99.6	99.6
1968	72.0	72.0	72.0	98.5	98.5	98.5
1969	74.4	74.4	74.4	101.8	101.8	101.8
1970	79.5	79.5	79.5	108.8	108.8	108.8
1971	85.2	85.2	85.2	116.6	116.6	116.6
1972	92.7	92.7	92.7	126.8	126.8	126.8
1973	100.0	100.0	100.0	136.8	136.8	136.8
1974	106.6	108.3	108.9	145.8	148.2	149.0
1975	112.4	115.4	117.4	153.7	157.9	160.6
1976	117.1	121.4	124.4	160.2	166.1	170.2
1977	122.0	127.8	131.9	166.9	174.8	180.4
1978	127.1	134.4	139.8	173.9	183.9	191.3
1979	132.4	141.4	148.2	181.2	193.4	202.7
1980	138.0	148.8	157.1	188.8	203.5	214.9
Ave. Annual Rate of Inflation 1973-80 Percent	4.7	5.7	6.7			

Economic Analysis and Projections Department

Table 2

COMMODITY PRICE FORECASTS

Price Index

	1972	1973	1974	1975	1976	1977	1978	1979	1980
1967-69 = 100									
36 Commodities	135.6	196.4	390.3	402.0	425.4	450.1	476.3	505.0	536.3
35 Commodities (excl. Pet.)	127.0	186.9	204.4	184.3	187.5	193.7	200.1	207.9	216.2
Agriculture	138.7	202.1	223.3	199.6	199.7	204.8	210.3	217.2	225.5
Food	151.0	210.5	230.2	203.0	203.7	209.2	217.1	225.1	234.4
Non-Food	115.2	186.1	210.2	193.1	192.3	196.5	197.4	202.1	208.6
Metal and Mineral	96.8	147.3	155.2	144.5	155.6	164.7	173.6	183.7	192.1
1973 = 100									
36 Commodities	69.0	100.0	198.7	204.7	216.6	229.2	242.5	257.1	273.1
35 Commodities (excl. Pet.)	68.0	100.0	109.4	98.6	100.3	103.6	107.1	111.2	115.7
Agriculture	68.6	100.0	110.5	98.8	98.8	101.3	104.1	107.5	111.6
Food	71.7	100.0	109.4	96.4	96.8	99.4	103.1	106.9	111.4
Non-Food	61.9	100.0	113.0	103.8	103.3	105.6	106.1	108.6	112.1
Metal and Mineral	65.7	100.0	105.4	98.1	105.6	111.8	117.9	124.7	130.4

Source: Commodities & Export Projections Division
Economic Analysis & Projections Department

CHART 3

PRICE INDEX
(1967-69 = 100)

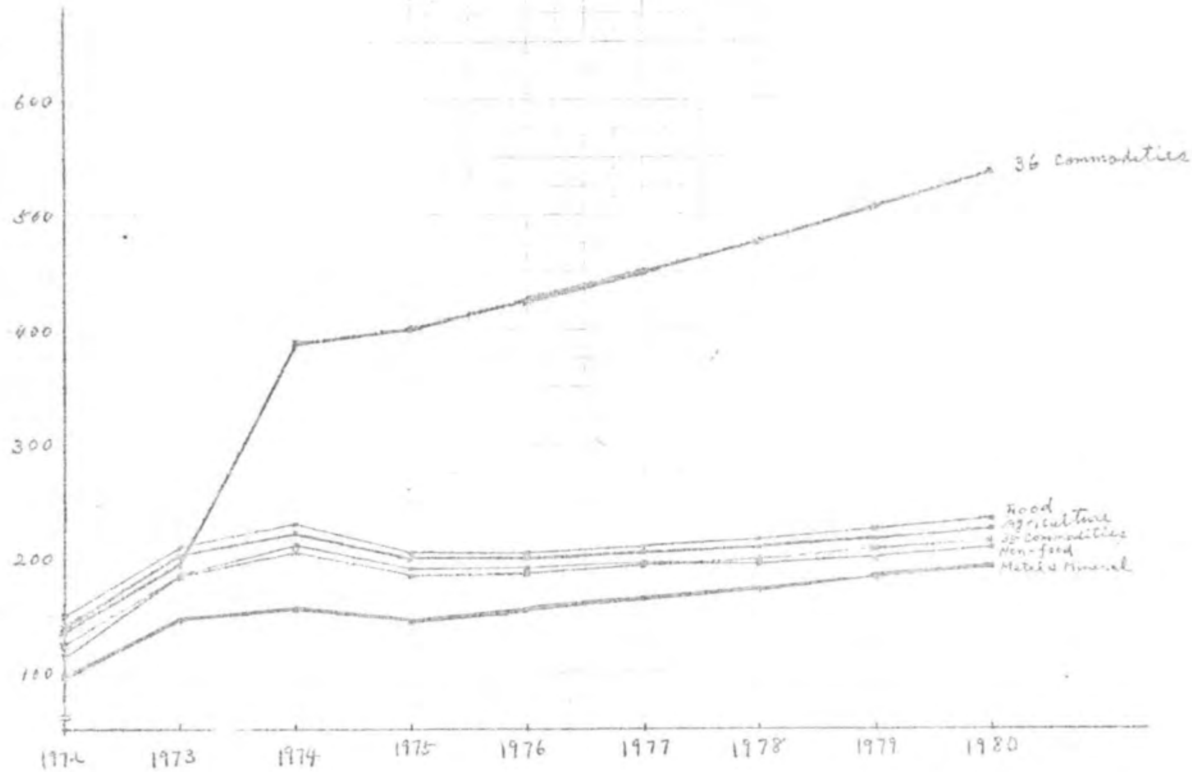
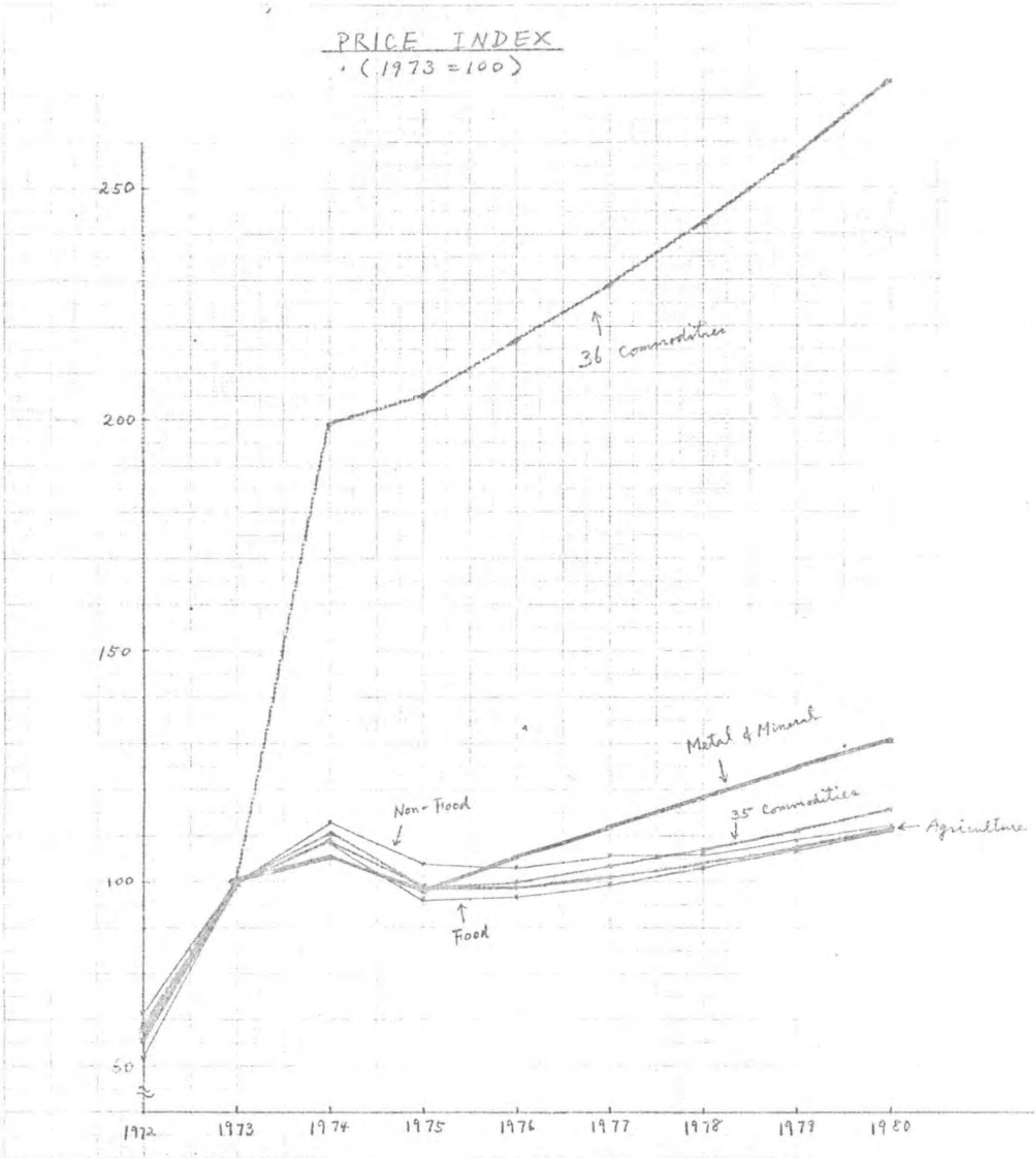


CHART 2



PRICE INDEX
(1973 = 100)
250
200
150
100
50
36 Commodities
Metal & Mineral
35 Commodities
Agriculture
Non-Food
Food
1972
1973
1974
1975
1976
1977
1978
1979
1980

Table 3

INDICES OF COMMODITY PRICE FORECASTS
(Current Terms)
1967-69 = 100

COMMODITY	ACTUAL PRICES		FORECAST PRICES							
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1985
Petroleum	146	208	615	665	713	760	810	864	923	
Cocoa Beans	89	181	179	179	179	179	179	179	179	
Coffee	125	155	163	155	155	163	163	175	175	
Tea	98	100	111	111	111	116	116	120	120	
Sugar	317	413	478	370	391	413	457	478	522	
Bananas	107	114	120	125	130	135	140	145	150	
Beef	159	207	207	199	199	207	223	231	254	
Hides & Skins	163	205	216	184	174	211	226	237	263	
Wheat	106	219	284	254	239	224	201	194	179	
Rice	74	177	177	152	126	126	126	126	126	
Maize	110	192	235	216	196	176	167	171	176	
Grain Sorghum	114	190	224	214	194	173	163	167	173	
Coconut Oil	64	89	123	123	122	121	120	118	117	
Copra	66	158	144	140	139	138	136	133	133	
Groundnut Oil	144	185	240	233	228	221	216	210	205	
Groundnuts	142	207	214	213	209	205	200	193	186	
Linseed Oil	91	247	155	156	160	163	165	169	171	
Palm Oil	114	201	206	205	204	204	201	201	200	
Fishmeal	165	374	414	414	414	448	448	431	431	
Soyabean Meal	133	443	247	247	253	258	263	263	268	
Cotton	127	177	233	217	210	200	193	183	183	
Jute	111	105	114	118	123	127	132	136	140	
Sisal	142	303	212	174	178	181	186	188	196	
Wool	141	304	290	246	210	174	145	152	159	
Rubber	82	164	182	136	136	145	145	159	159	
Tobacco	101	103	106	113	120	127	133	139	146	
Logs	103	168	175	193	213	230	250	275	300	
Copper	83	140	129	121	131	138	145	152	155	
Lead	119	169	157	144	157	170	183	191	204	
Silver	92	140	178	191	199	205	216	224	232	
Tin	115	147	168	168	181	195	208	221	235	
Zinc	138	311	395	218	230	242	258	290	302	
Bauxite	130	140	190	190	210	230	250	270	300	
Iron Ore	108	158	129	122	136	147	156	170	185	
Manganese Ore	100	113	100	93	105	117	127	139	155	
Phosphate Rock	89	98	323	323	323	323	323	323	323	
Ammonia	200	320	440	520	520	440	420	400	400	
Urea	172	281	328	328	328	328	328	328	328	
Steel	159	210	242	253	258	268	274	278	283	

Commodities and Export Projections Division
Economic Analysis and Projections Department

Table 4

COMMODITY PRICE FORECASTS

COMMODITY	UNIT	ACTUAL PRICES			FORECAST PRICES							
		1967-69	1972	1973	1974	1975	1976	1977	1978	1979	1980	[illegible]
Petroleum	US$/barrel	1.30*	1.90	2.70	8.00	8.55	9.27	9.88	10.53	11.23	12.00	
Cocoa Beans	¢/lb.	35	32	65	65	65	65	65	65	65	65	
Coffee	¢/lb.	40	50	62	65	62	62	65	65	70	70	
Tea	Pence/kg.	43	42	43	48	48	48	50	50	52	52	
Sugar	¢/lb.	2.3	7.3	9.5	11	8.5	9.0	9.5	10.5	11.0	12.0	
Bananas	¢/kg.	12.7	13.6	14.5	15.2	15.9	16.5	17.1	17.8	18.5	19.0	
Beef	Pence/kg.	-	100	130	130	125	125	130	140	145	160	
Hides & Skins	¢/lb.	19	31	39	41	35	33	40	43	45	50	
Wheat	$/MT	67	71	147	190	170	160	150	135	130	120	
Rice	$/MT	198	147	350	350	300	250	250	250	250	250	
Maize	$/MT	53	56	98	120	110	100	90	85	87	90	
Grain Sorghum	$/MT	49	56	93	110	105	95	85	80	82	85	
Coconut Oil	$/MT	363	234	323	447	445	443	438	436	428	423	
Copra	$/MT	223	141	336	307	298	296	294	290	283	283	
Groundnut Oil	$/MT	295	426	545	708	687	673	652	637	620	605	
Groundnuts	$/MT	184	261	381	394	392	385	377	368	355	342	
Linseed Oil	$/MT	226	206	558	350	355	362	368	373	382	386	
Palm Oil	$/MT	191	217	383	393	392	390	390	384	384	382	
Fishmeal	$/MT	145	239	542	600	600	600	650	650	625	625	
Soyabean Meal	$/MT	97	129	430	240	240	245	250	255	255	260	
Cotton	¢/lb.	30	38	53	70	65	63	60	58	55	55	
Jute	£/LT	114	127	120	130	135	140	145	150	155	160	
Sisal	£/LT	69	98	209	146	120	123	125	128	130	135	
Wool	Pence/kg.	69	97	210	200	170	145	120	100	105	110	
Rubber	¢/lb.	22	18	36	40	30	30	32	32	35	35	
Tobacco	$/MT	912	943	960	990	1,050	1,120	1,180	1,240	1,300	1,360	
Logs	$/m³	43	41	67	70	77	85	92	100	110	120	
Copper	¢/lb.	53	48	81	75	70	76	80	84	88	90	
Lead	¢/lb.	11.5	13.7	19.4	18.0	16.5	18.0	19.5	21.0	22.0	23.5	
Silver	$/Troy oz.	1.83	1.68	2.56	3.25	3.50	3.65	3.75	3.95	4.10	4.25	
Tin	$/lb.	1.49	1.71	2.19	2.50	2.50	2.70	2.90	3.10	3.30	3.50	
Zinc	¢/lb.	12.4	17.1	38.6	49.0	27.0	28.5	30.0	32.0	36.0	37.5	
Bauxite	$/lb.	10	13	14	19	19	21	23	25	27	30	
Iron Ore	$/MT	7.3	7.9	11.5	9.4	8.9	9.9	10.7	11.4	12.4	13.5	
Manganese Ore	¢/LTU	54.7	64.5	72.8	65.0	60.0	68.0	76.0	82.0	90.0	100.0	
Phosphate Rock	$/MT	8.2	7.3	8.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	
Ammonia	$/MT	25 1/	50	80	110	130	130	110	105	100	100	
Urea	$/MT	32 1/	55	90	105	105	105	105	105	105	105	
Steel	US$/MT	99.0	157.4	207.6	240.0	250.0	255.0	265.0	271.0	275.0	280.0	

1/ 1969 only.

COMMODITY DESCRIPTION

Petroleum (Saudi Arabian light crude oil 34° average realised price f.o.b. Ras Tanura)

FOOD

Cocoa Beans (Accra, spot New York)
Coffee (Guatemalan, prime washed, spot New York)
Tea (London Auction, Average all teas)

Sugar ("World" ISA daily price, f.o.b. Caribbean)
Bananas (Ecuadorian c.i.f. Hamburg)

LIVESTOCK PRODUCTS

Beef (Argentine, chilled rump boneless, wholesale price, London)
Hides & Skins (Argentine, Frigorifico light, c.i.f. U.K.)

GRAINS

Wheat (Canadian Western Red Spring 14% (CWRS), in store Thunder Bay)
Rice (Thai, Milled 5% broken f.o.b. Bangkok)
Maize (U.S. No. 2, yellow, f.o.b. Gulf Ports)
Grain Sorghum (U.S. No. 2 Milo yellow f.o.b. Gulf Ports)

FATS AND OILS

Coconut oil (Ceylon 1% c.i.f. Europe)
Copra (Philippines, c.i.f. Europe)
Groundnut Oil (Nigerian, c.i.f. Europe)
Groundnuts (Nigerian, c.i.f. Europe)
Linseed oil (Argentine/any origin, c.i.f. Europe)
Palm oil (Malayan c.i.f. U.K.)
Fishmeal (Peruvian c.i.f. Hamburg)
Soyabean Meal (U.S. 44% extraction, c.i.f. North European Ports)

NON-FOOD

Cotton (Mexican SMI-1/6", c.i.f. Liverpool)
Jute (Bangladesh white D. f.o.b. Chittagong Chalna)
Sisal (East African Rejects, c.i.f. Europe)
Wool (56's clean, c.i.f. U.K.)
Rubber (RSSI, spot New York)
Tobacco (India export unit value of flue-cured)

TIMBER

Logs, Broadleaved (Philippines, Tokyo price)

METALS AND MINERALS

Copper (LME)
Lead (LME)
Silver (Handy & Harman, New York)
Tin (LME)
Zinc (LME)
Bauxite (Average export unit value)
Iron Ore (Average export unit value of LDC's)
Manganese Ore (Indian Ore 46-48%, c.i.f. U.S. Ports)
Phosphate Rock (U.S. Grade 70-72%, carlots at mine)
Ammonia) Estimated average world price based on
Urea) export tenders.

Steel (German, Domestic/Export price delivered Oberhausen basis, producer price, Bessemer basis).

INITIAL WORKING HYPOTHESIS: FEBRUARY 1974

1. Annual rates of growth (%) of Real GNP

	1959/60 - 1970/71	1972	1973	1974	1975	1976 - 1980
Japan	11.1	9.6	10.4	1.7	5.5	7.5
France	5.8	5.5	6.3	4.2	4.0	4.5
Germany	4.9	3.0	5.5	0.7	2.5	4.5
U.K.	2.9	3.0	5.6	- 2.5	2.5	3.0
Italy	5.5	3.5	5.2	5.0	4.0	4.5
U.S.A.	3.9	6.1	5.9	0.0	2.5	4.0
Canada	4.9	5.8	7.0	4.25	5.0	5.5

2. Consumer Price Indices. % increase over previous year

	1972	1973	1974
Japan	4.4	11.5	16.5
France	6.2	7.5	12.8
Germany	5.7	7.2	8.5
U.K.	6.5	8.5	12.5
Italy	5.7	10.7	13.0
U.S.A	2.6	5.2	8.5
Canada	3.5	5.4	8.0

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: ALBERTO CARVALHO DA SILVA
CAIXA POSTAL 49-ZL-00
RIO DE JANEIRO

DATE: March 1, 1974

CLASS OF SERVICE: LT

COUNTRY: BRAZIL

TEXT:
Cable No.:

AT MY SUGGESTION MR. LARS JEURLING FROM THE BANK WILL CONTACT YOU MARCH SEVENTH IN REFERENCE TO BANK WATER AND SEWAGE PROJECT IN MINAS GERAIS EXECUTED BY COMAG STOP PROJECT INCLUDES SURVEY OF SEVENTHOUSAND HOUSEHOLDS CONDUCTED BY UNIVERSITY STOP PLEASE DISCUSS WITH HIM POSSIBILITY OF INCLUDING QUESTIONS ON NUTRITION STATUS IN CURRENT SURVEY STOP ALSO ADVISE ON SETTING UP LONGITUDINAL STUDY OF PROJECTS IMPACT FOR NUTRITIONAL STATUS STOP SUCH A STUDY MIGHT BE INCLUDED IN SURVEYS AND STUDIES COMPONENT OF NUTRITION PROJECT STOP REGARDS

REUTLINGER

WORLDBANK

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Shlomo Reutlinger

DEPT. Development Economics Department

SIGNATURE
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:
SReutlinger:coh

CLEARANCES AND COPY DISTRIBUTION:

cc: Mr. Berg
Miss Sant'Anna
Mr. T. King

For Use By Communications Section

Checked for Dispatch:

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

ECONUNIT LONDON

OP-RESEARCH (TOURISM)

G 1065

INCOMING TELEX

Log.93

orig: AH
cc: SMT
VAS
AO
LV

28.2.74

Distribution: Tourism Projects
AB
JFB
JR

Re: "Energy Crisis

MR ANDREW HAYMAN

TOURISM PROJECTS DEPARTMENT

WORLD BANK

WASHINGTON

USA

THANK YOU FOR TELEPHONING YESTERDAY REGARDING STUDY ON IMPACT OF ENERGY CRISIS ON TOURISM. SORRY I WAS NOT AVAILABLE TO DISCUSS I UNDERSTAND YOU WISH US TO PROCEED WITH THE MACROECONOMIC PART OF THE STUDY, BUT DELETE THE INTERVIEWING PROGRAMME. ALLOWING FOR YOUR BUDGET CONSTRAINT I THINK IT BEST IF WE ALLOCATE 30 MAN DAYS TO THE MACROECONOMIC STUDY AT A PER DIEM RATE OF 70 POUNDS STERLING. WE CAN THEN BILL YOU A FEE OF 2100 POUNDS STERLING PLUS EXPENSES UP TO A MAXIMUM OF 300 POUNDS STERLING. YOU WILL APPRECIATE THIS LIMITS OUR RESEARCH INPUT SOMEWHAT AND HENCE THE DEPTH OF COVERAGE WE CAN GIVE TO SOME ASPECTS OF THE STUDY. HOWEVER WE SHALL BE GREATLY ASSISTED IF YOU CAN PROVIDE US WITH YOUR PROJECTIONS OF INCOME TO 1980 FOR EACH COUNTRY AND PETROLEUM PRODUCT PRICES TO USE AS BASIC ASSUMPTIONS IN OUR STUDY, AS YOU SUGGESTED. WE CAN START WORK ON THE ASSIGNMENT IMMEDIATELY BUT I SHOULD BE GLAD IF YOU COULD PUT IN WRITING YOUR ACCEPTANCE OF THE SCOPE AND TERMS OF OUR STUDY

Tourism Projects Department
Date Received: FEB 27 1974
Replied by: no action taken
Date Action Taken: 3-4-74

BEST WISHES

RAY PIERCE

DEVELOPMENT AND PLANNING DIVISION EIU LONDON

++++++

INCOMING TELEX Energy task force LOG 98

RECEIVED OA-RESEARCH (ENERGY)

MAR 1 10 59 AM 1974

COMMUNICATIONS SECTION

OH

INTBAFRAD WSH

SANDWELL VCR

Distribution: Industrial Projects

cc Mr Moore
Mr Dewey

27 FEBRUARY 1974-302

FOR FRED MOORE/CHAUNCEY DEWEY, INDUSTRIAL PROJECTS BRANCH

REF QS1159

CONFIRMING TELEPHONE CONVERSATION:

1. QUANTITATIVE MEASURE OF PAPER DEMAND ELASTICITY WITH RESPECT TO ENERGY COST IS THE ONLY MATTER THAT CAN NOT BE TREATED MEANINGFULLY IN TIME AVAILABLE.

2. RECOMMEND SEPARATE TREATMENT OF THERMAL AND MECHANICAL ENERGY.

3. SUGGEST SENSITIVITY INDEX BE BASED ON RATIO OF FUEL COST TO TOTAL MANUFACTURING AND RAW MATERIAL COST. THIS REQUIRES COMMON BASIS AMONG ALL STUDIES FOR SUCH THINGS AS CAPITAL CHARGES, FUEL COMPONENT OF ENERGY COST, OVERHEAD ALLOWANCES.

4. TO ACHIEVE UNIFORMITY OF TREATMENT I BELIEVE VISIT TO WASHINGTON REQUIRED AT EARLY STAGE.

5. SOME PARTS OF STUDY MAY DROP OUT BECAUSE OF NEGLIGIBLE IMPACT OF ENERGY COSTS.

JACK KENDRICK

SANCONSULT

012.00

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OP - RESEARCH (TELECOMMUNICATIONS)

yellow

OFFICE MEMORANDUM

TO: Mr. Yves Rovani

DATE: February 26, 1974

FROM: J. Warford, R. Schkolnick & M. Lane

SUBJECT: COSTA RICA - Rural Telecommunications Research Project
Back-to-Office and Full Report

1. In accordance with terms of reference dated February 6, Mr. Schkolnick and Mr. Lane visited San Jose February 18-21; Mr. Warford was with the mission February 19-21. A field trip was organized to examine physical locations of rural telephones, and visits were made to exchanges at San Pedro and Heredia and to rural telephones at Orosi and Rio Machos. Concessionaires currently conducting the survey of telephone usage at these locations were interviewed.

2. The mission met with Messrs. M. Tristan and V. Cespedes of the University of Costa Rica and Mr. Jorge Loria of ICE. Major points of discussion were as follows:

Progress to Date

3. So far the following progress has been made:

(i) completion of pilot studies for the nationwide survey of telephone usage (carried out by concessionaires),

(ii) completion of the interviews of concessionaires,

(iii) completion of the collection of agricultural census data,

(iv) launching of the one month nationwide survey of telephone usage based on (i) (to be completed by February 28),

(v) collection of certain other census data including housing, population and income statistics.

The collection of revenue data had been postponed pending the completion of the nationwide survey.

Immediate Next Steps

4. These include:

(i) completion of the collection of census data to assist in the classification of villages,

(ii) collection of revenue data and tabulation of such data,

(iii) continuation of the survey of telephone usage (based on 3 (iv)) on a stratified sample basis,

(iv) identification of appropriate strata for the sample survey,

(v) design of questionnaires for the interview of telephone users.

Points of Discussion

5. The identification of telephone users directly from the current survey is not possible. Pilot studies (referred to in 2 (i)) revealed social resistance to this question. Other means must therefore be found of identifying a sample of users. The cooperation of concessionaires and an examination of repeat calls may be of assistance in defining an appropriate sample.

6. It was agreed to extend the sample survey of usage from 6 months to 1 year to capture seasonal influences on telephone usage. In principle this could be conducted on a one week per month basis but it is administratively simpler to conduct it continously.

7. A continous survey of usage throughout the year requires considerable cooperation from the concessionaires. This is best ensured by some form of payment. Payment on a per call basis might be more equitable but insufficient data were presently available to estimate the cost of this. A flat rate of 50 colones per month would cost about $750 for the year. It was agreed that ICE would be asked to contribute this sum and Mr. Tristan would speak to Mr. Canas about it as soon as possible. (Mr. Canas was not available during the visit.)

8. Use of the sample survey should be flexible. Experience gained with the questionnaire and the emergence of gaps in the data should if necessary lead to changes in parts of the existing format. The volume and type of "emergency" calls (as opposed to "health" calls) could usefully be collected. Similarly, more detailed definition of the type of agricultural use e.g. whether dairy or coffee farms, could replace collection of the volume of political calls. The latter could be reclassified as personal calls.

9. Collection of revenue data from ICE should parallel the next steps in the design of the users' survey. These data, combined with estimates of incremental consumer surplus would form the basis for estimating the benefits of rural telephones. Revenue data should, where possible, be classified by type of call and destination. It would be useful to know if major benefits (as represented by revenues) derive from personal business, inter-rural or urban calls.

10. Preliminary results suggest that a major proportion of the usage of rural phones (perhaps greater than a half) consists of incoming calls. It is important therefore to know of their origin and of the benefits received by the caller. Perhaps a small sample of urban callers to rural phones should be interviewed in order to estimate their consumers' surplus. Information for determining this sample can be obtained (in some cases) from the usage survey. In this connection care should be taken to avoid double counting of inter-rural calls.

11. Where it is possible to identify the telephone users, it would be useful to describe the "use-pyramid" for villages. For example, are 80% of the calls made by 5% of the population or vice versa? These data would indicate the penetration of telephone use in the villages.

12. A caution was raised concerning the interpretation of village socio-economic characteristics. These data may be used to establish the nature of demand for calls, given the existence of a rural phone, but, because of ICE's allocation system, it should not necessarily be taken as an element of demand for the placement of the phones.

13. It was agreed that factor analysis of socio-economic characteristics be kept to a minimum. This sort of analysis would be best done by a graduate student, but in any event should not be used for correlation or prediction. On the other hand, the study would benefit by the adoption of useful classification schemes and this could be best done by a discriminate analysis.

14. The objectives of the study were restated as an examination of the demand for, and an estimation of the benefits, derived from rural telephones. It was stressed that this should be done with the cooperation of ICE and should be closely geared to ICE's investment objectives. These involve both the expansion and upgrading of the existing rural network. Choice of samples and classification schemes should therefore reflect regional characteristics and be an aid to further investment appraisal.

Future Action

15. The next steps should be:

(i) A letter to the Bank from Mr. Marco Tristan at the end of March reporting on:

(a) the agreement between him and Mr. Canas on the payment of concessionaires,

(b) notes on any changes that might be made for the sample of telephone usage to be carried out over the twelve month period,

(c) a revised timetable for the study, including report submission,

(d) a pilot questionnaire for the user interviews,

(e) preliminary and impressionistic results arising from the one month nationwide usage survey.

(ii) A field trip by Bank personnel in May to participate in the pilot survey of telephone users. The design of this survey is extremely important if adequate estimates of benefits are to be obtained.

16. Finally it was agreed that it would be desirable for Mr. Marco Tristan to attend the Birmingham conference on the economics of telecommunications to be held in May 1974 under the directorship of Prof. S. C. Littlechild. It was felt that the Bank should encourage this participation and it is recommended that financial support be given to him for this venture.

JWarford/RSchkolnick/MLane:pjk

cc: Mr. Tristan

cc: Mr. Vasudevan
Mr. Sheehan
Mr. Dolenc

OP-RESEARCH (TOURISM)

G 1005

→ A.H.

File: Energy Crisis

THE ECONOMIST INTELLIGENCE UNIT LIMITED

SPENCER HOUSE
27 ST JAMES'S PLACE
LONDON
SW1A 1NT
Registered Office

TELEPHONE 01-493 6711
TELEX 266353
CABLES
ECONUNIT LONDON SW1
Registered No.563972 England

RP/JIB

22nd February 1974.

Mr. Andrew Hayman,
Tourism Projects Department,
International Bank for Reconstruction
& Development,
181 H. Street, N.W.,
Washington, D.C. 20433,
U.S.A.

x. reply needed

Dear Mr. Hayman,

Following your telephone call to Anthony Edwards at the end of last week concerning your study of the impact of the energy crisis on international tourism, I am writing to set out some indications of the type of work we are involved in on this subject and hence what we might be able to make available to you, within the context of your time constraint. I understand that you are looking for a report on this subject by mid-April, 1974; the remarks below specifically allow for this, and the limited input of research time which is implied. Essentially what we are able to offer you is an output from ongoing research projects, specifically tailored to meet our understanding of IBRD's needs.

The research would cover the impact of the increases in oil prices and the limitations of supply on international tourism over the period 1974/75 up to 1980. The emphasis would be on the implications for long-haul tourist travel, but we would also try as far as possible to consider the situation in respect of European travel to N. Africa and the Eastern Mediterranean. For these purposes, the following traffic generating countries would be considered:

United Kingdom
West Germany
France
Japan
United States.

The impact of the changed energy situation on long-haul tourism can be assessed in several ways, considering both direct and indirect operation of price and

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COMMUNICATIONS
SECTION

and income effects. Under price effects would be included such aspects as increased fare charges, and higher prices of other goods and services in both recipient countries and generating countries. Income effects would include lower than expected incomes in generating countries, and the effects on tourism of any measures taken by these countries to protect their balances of payments. Examination of the various effects would obviously require a consideration of the price and income elasticities for tourism over the short and medium-term.

The research is envisaged to have two basic components. First a macroeconomic analysis of the various price and income effects, covering expected income levels in generating countries, the various price changes, and possible resulting legislative changes. Secondly, an interview programme, to provide more qualitative information on the various effects to feed into the study at several points. The focus of the interviewing programme, for obvious reasons of cost and time limitations, would be on the travel and tourism industry in Western Europe. The programme would include interviews with the major tour operators, long-haul airlines and travel agents in the United Kingdom, Western Germany, and France. Output from the interviews would provide a valuable background to the macroeconomic assessment of the various price and incomes effects, based on the most informed opinion within the travel and tourism industry itself.

The costs for the research are obviously difficult to estimate at this stage, although they will naturally be limited by the time constraint. Possibly the easiest method to follow would be for the EIU to bill you for actual costs incurred, based on our standard set of per diem rates. These vary between about £60 to about £90, although for the level of staff likely to be involved in this exercise would probably average around £70 per day. On this basis, approximate costs could be estimated as follows: £2500 - £3000 for the macroeconomic exercise, plus £1500 to £2000 for the interviewing programme (the latter figure being inclusive of expenses). These figures are only approximate, but time and capacity limitations make it unlikely that they could be significantly exceeded.

I hope you will find the above outline of interest, and I look forward to hearing your reaction. If you have any additions or ammendments we should naturally be pleased to incorporate them, so please treat the above as a provisional outline. Should you decide to go ahead with the study, we stand ready to set our research in hand immediately.

Yours sincerely,

R. F. Pierce,
Senior Research Consultant,
Development & Planning Division.

✓OP-RESEARCH (TRAFFIC RESTRAINT STUDY: SINGAPORE)
cc Singapore - Mass Rapid Transit Study

Mr. H. Hochstadt
Permanent Secretary
Ministry of Communications
Singapore 6

February 21, 1974

Dear Mr. Hochstadt:

I am writing to thank you for the courtesies extended to my colleagues and myself on the occasion of our recent mission to Singapore. I was impressed by the determination of your Government to deal with Singapore's transport problems and would like to assure you of the Bank's interest in helping you to work out and implement economic solutions to them.

Our mission took note of the Steering Committee's intention to recommend to the Government that Phase II of the Mass Transit Study should consist of further economic, technical and financial investigations into the feasibility of the rail-based mass rapid transit system "3R". As agreed at the Steering Committee meeting of February 1, we are now drafting, for your review and agreement, terms of reference for Phase II along the broad lines outlined in our note for the Steering Committee.

We have also noted the Steering Committee's wish that Wilbur Smith and Associates be invited to make a sole proposal for carrying out Phase II of the study. The Bank would have no objection to this course. We hope to send you a draft of the Phase II terms of reference in ten days, and are tentatively scheduling a mission to Singapore for the middle of March to discuss with you and your officials any remaining problems on the content and financing of Phase II and the selection of consultants.

I also wish to iterate our interest in assisting Singapore through the preparation of a project for urgent short-term measures to relieve the transport situation. As we outlined during our mission, such a project could consist of financial and technical assistance for the following major elements:

(a) purchase of new buses and repair and rehabilitation of the existing bus fleet;

(b) provision of bus maintenance equipment and facilities;

(c) improvements relating to implementation of intersection and surface street modifications to facilitate the introduction of a bus priority scheme on major mass transport routes and corridors in the central area;

(d) provision of equipment for an area-wide traffic light control scheme to facilitate better traffic management;

(e) provision of funds to cover additional foreign costs of consultant services for the Phase II Mass Transit Study;

(f) provision of funds to cover foreign costs of consultant services for the proposed traffic restraint study, and

(g) implementation of a monitoring and evaluation program to provide continuous feedback to the Government on the effectiveness of the various policy and investment measures expected to be pursued over the coming months.

The mission in March would hope to discuss in detail the above elements and define the scope of a project for Bank financing. If these ideas accord with the Government's wishes, we would appreciate an early indication from you as to the suitability of a March mission and its most convenient timing.

Sincerely yours,

EVKJ

Edward V.K. Jaycox
Director
Transportation and Urban
Projects Department

cleared with and cc: Mr. Helmers, East Asia & Pacific

GJRoth/RVenkateswaran:os

LAC Files

OFFICE MEMORANDUM

TO: Messrs. L. Jeurling (ECC, LCPWS) and John Saunders (CONS)

DATE: February 21, 1974

FROM: John M. Kalbermatten (Chief, LCPWS)

SUBJECT: BRAZIL - Supervision of Minas Gerais Socioeconomic Study Terms of Reference

1. You should proceed to Belo Horizonte on or about March 6, 1974 to assist the study team of COMAG and the Federal University of Minas Gerais to design a study, the primary purpose of which is to establish the pattern of water consumption in the State of Minas Gerais.

2. Dr. Saunders will be primarily responsible for the sociological aspects of the study (including the design of the household survey questionnaire). Mr. Jeurling will be responsible for the economic aspects.

3. When you arrive in Belo Horizonte, the study team will already have made a preliminary classification of the municipalities of the state and determined how the sample should be drawn. They will also have prepared a questionnaire and tested it. You should review the work done so far and propose modifications in the study if necessary. In particular, you should examine:

   (i) the focus of the study. It appears from the research proposal that the study is over-emphasizing income and income distribution determination at the expense of surveying water and sewerage consumption patterns.

   (ii) the methodology used to classify municipalities into types and the selection of the sample.

   (iii) the design of the questionnaire.

4. You should pay special attention to the study as a means to collect baseline data for monitoring and evaluation of the Minas Gerais project. The original research proposal made by the university, which is the basis for the present contract, did not include the monitoring and evaluation part of the study. The university therefore claims that, within the scope of the study, they could only identify the most suitable areas to be monitored, but not collect the data.

5. You should investigate whether, in fact, the information to be collected through the household survey now being prepared, combined with the information collected for the Global Feasibility Study, could not be used as baseline data for a monitoring and evaluation study (maybe by adding some questions to the household survey).

6. During your stay in Belo Horizonte, Mr. Jeurling should also discuss the progress of the Global Feasibility Study with COMAG and the consulting firm, SERETE.

7. If, in discussions with COMAG and the study team, you conclude that the study will need to be modified to determine the health effects of water and sewerage investments, you should also visit the School of Public Health in Sao Paulo to discuss the study and the possible input into it that the school could provide.

8. Upon your return, Dr. Saunders should stay two or three days in Washington, and you should prepare a Back-to-Office and Full Report on the progress of the study.

Cleared with and cc: Mr. Kikuchi (LC2DA)

cc: Messrs. Knox (LCPDR), Geli (LCPDR), Skillings (LC2DA), Kalbermatten (LCPWS), van der Tak (VPSVP), Rovani (PBPDR), Bowron (PAB), Buhler (LEG), Helne (CTR), Mrs. Steiner (LCPPT), LAC Files, Division Files

LJeurling:clh

OFFICE MEMORANDUM

TO: Files

DATE: February 21, 1973

FROM: Michèle Konings

SUBJECT: Back-to-Office Report

In accordance with my terms of reference dated December 18, I undertook the collection of basic data on Senegalese industry in connection with the research project on industrial policy and economic integration in West Africa. I worked in cooperation with the Centre for Applied Economic Research at the University of Dakar and established contacts with various administrative departments.

1. Cooperation with the Centre for Applied Economic Research (CREA)

A preliminary arrangement has been reached with the Centre for its participation in the study on Senegal. The study will be undertaken jointly by Messrs. Bathilly and Horton. The Centre will provide a first report concerning the comparison of prices of locally produced and imported products as well as a description of the tariffs, quantitative protection and subsidies affecting individual local firms and industries. A second report will provide information on the input structures of locally produced industrial products and the protection affecting these inputs. Further studies will be undertaken on the decomposition of non-tradeable inputs and petroleum products, taxes and subsidies to agriculture.

2. Collection of Data

I first established a sample of individual firms that are representative of the various industrial branches of the Senegalese economy. Next, I began the collection of data needed to make comparisons of ex-factory prices of local industrial products, f.o.b. export prices and c.i.f. prices of equivalent imported products. The major source of information is the Directorate of Internal Trade. This has dossiers relating to the firms whose prices have been controlled by the Senegalese government since the price freeze of 1968.

I was permitted to have access to the files of the principal firms in the following branches: Textiles, Chemical Products, Beverages and Food Products, Canned Foods, Metallic Packing, Wood, and Paper and Carton. This work will be pursued by the CREA.

3. I also contacted the following to obtain information on price relationships and input structures:

a) The Planning Ministry (Mr. Madieng Diakhaté, Cabinet Director)

b) The Directorate of Statistics at the Finance Ministry (Mr. Serigne Lamine Diop, Director, Mr. Ibrahim Diop from Industrial Statistics and Mr. Boubacar Ba from Trade Statistics)

c) The Directorate of Industry at the Finance Ministry (Mr. Archambaud and Mr. Morisot, cooperants)

d) The Directorate of Foreign Trade at the Finance Ministry (Mr. Pierre Kama, Director and Mr. Gaye, Assistant Director)

I attended a meeting of the Textiles Sub-Commission which studies and makes recommendations regarding applications to import textiles.

e) The Custom Directorate (Mr. Badji, Principal Inspector)

f) The Chamber of Commerce (Mr. Traoré, import controls)

g) The Central Bank (BCEAO) (Mr. Sène, Director of the Research Services and Messrs. Hasser and Mesny)

h) The National Society of Studies and Industrial Promotion (SONEPI) (Mr. Hervouet, Assistant Director, and Mr. Bernard Denis, cooperant)

4. I have been well-received in all government offices and have been able to obtain additional information from them. However, information on prices and input structures available from government departments needs to be supplemented by data collected from individual firms. This will be provided by Mr. Seydi, a local chartered accountant, and by Messrs. Bathilly and Horton of CREA. It is also planned that I should participate in this work during the mission to be led by Mr. Balassa in May.

cc. Messrs. Cauas
Duloy
Balassa
Stoutjesdijk
Pursell
de Vries
Jansen
Huber
Bachmann
Noël

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OP. Research (Industrial Location Decis

OFFICE MEMORANDUM

TO: Files

DATE: February 20, 1974

FROM: Ian Scott

SUBJECT: MEXICO: Industrial Location Decision Making: Further Notes on Research Proposal

A draft research proposal (attached) which had been informally discussed within the Bank was sent to Leopoldo Solis (Presidencia) in November 1973. This draft was discussed (Leopoldo Solis, Carlos Basdresch and myself) during the urban survey mission in January. The following points emerged:

1. The Government (Presidencia) is enthusiastic about going ahead with the study.

2. They are concerned that the project should not be unrealistically ambitious. This implies that it should concentrate on a few industrial sub-sectors (probably those which have been most dynamic in the recent past) and on a few geographic locations.

3. There is concern that the difference between historic decisions (rationalized ex post) and hypothetical decisions (considered ex ante) should be clarified, but both should be investigated.

4. They wish to emphasize the importance of objective factors in location decisions (i.e. comparative costs) and feel that the draft proposal may have implied an emphasis on other (subjective) factors. I suggested this was a misinterpretation of the draft but that there was no disagreement on this point.

5. Leopoldo Solis feels that the cost differences between alternative locations should be clarified in terms of (a) public costs and (b) private costs. The former category has implications for the allocation of public (particularly) investment resources whereas the latter category essentially refers to costs to an enterprise. If subsidies are considered, these, too, might be translated into public expenditures.

6. As far as possible the Government would like to use the survey as a basis for formulating specific goals and policies and as a means of obtaining a realistic idea of public expenditure implications for decentralization policy (however these might arise).

7. Whereas Leopoldo Solis had previously mentioned the Instituto Tecnologico in Monterrey as a possible source of expertise (see section E of draft proposal) he now feels that it might be possible to bring the Colegio de Mexico into the project and has had a preliminary discussion with Victor Urquidi who showed interest. This arrangement would not (he thinks) exclude the Tecnologico. It appears, moreover, that the Presidencia would want to be fully involved in the work, retaining overall control and

responsibility and employing both the Colegio and the Tecnologico as consultants to undertake specific work on a contract basis. The Presidencia would also welcome the active involvement of the Bank at all stages, particularly that in which the survey data would be analysed and conclusions reached. I pointed out that there would be no a priori objection to the participation of both the Tecnologico and the Colegio but that it would be necessary to define their respective roles with care. It would also be necessary to specify what Presidencia personnel would be made available for the project, and in addition to clarify the way in which the Bank might participate. With regard to this, the Presidencia approach has (I think) been influenced by the experience which it gained with Bank participation in building the agricultural sector model (CHAC). There is no suggestion at present of an arrangement like that under which Roger Norton (D.R.C.) has been in Mexico for a two year period, but the prospect of close collaboration on a study of this kind would certainly be an interesting development in our economic work, whether the Bank role were direct or was achieved through providing a temporary consultant for the analytical stage of the project.

8. In addition to the questions arising about which institutions should participate and how their work should be coordinated, there are several other questions. One concerns cost. Another concerns timing. Another concerns the definition of an appropriate methodology. Until these questions are answered, it will not be possible to complete a formal proposal for presentation to the research committee. Last November, we hoped that it would be possible to reach agreement with Presidencia in time to make a submission in March 1974. It is still possible that we can meet this deadline. On the other hand, given the enthusiasm of the Government and the fact that this project could perhaps turn out to be of even greater interest to the Bank and to the country than we had originally thought, it would be sensible, if these questions cannot be resolved in time, to present the project to the next session of the research committee, September 1974. It was nevertheless agreed that Messrs. Solis and Basdresch would try to provide answers to our questions by the end of February and that a final decision on the timing of the submission would be held over for the time being.

IScott:ak

(To Be Filled By Research Committee)

Review number   Project number

WORLD BANK RESEARCH PROGRAM
Project Proposal

Date of Submissi

NOVEMBER 1973

PART I. PROJECT IDENTIFICATION

1.Title: INDUSTRIAL LOCATION IN MEXICO

2.Department Responsible: LAC I	3.Staff Member Responsible:
4.No. of Contracts: 1	5.Total Estimated Cost: $50,000

6.Total Estimated Staff Time:
Professional: 2 months   Special Services: -

Part II. COORDINATION AND APPROVAL

1.Interdepartmental Coordination:

	Department	Name & Signature	Support Project	Do not Support Project-Comments Submitted
a.	MEXICO DIVISION/LAC I	E. LERDAU		
b.	URBAN AND REGIONAL ECONOMICS	D. KEARE		
c.	URBAN PROJECTS	R. VENKATESWARAN		
d.	INDUSTRIAL ECONOMICS	H. HUGHES		

2.Approval:

Division Chief   Department Director

PART III. IMPLEMENTATION

1. Date Work to Start: MARCH 1974

2. Date First Draft Expected: DEC. '74

3. Final Report Due: MARCH 1975

4. Implementation Method:

   a. Bank Staff. . . . . / /

   b. Individual Consultants. . . . . / /

   c. LDC Contractor/Institute. . . . . /X/

   or/d. Developed Country Contractor/Institute. . . . /X/

   e. Seminar . . . . / /

5. Reports Expected in Current Fiscal Year:

   1. REPORT ON ALTERNATIVE CONSULTANT SOURCES

   2. REPORT ON PILOT SURVEY

PART IV. FINANCIAL AND STAFF DATA

1. Dollar Costs (Estimated Disbursements by Fiscal Year):

	FY 74	FY 75	FY	After FY	Total
a. Contractual	30	20			50
b. Travel					
c. Data Processing					
Total	30	20			

2. Staff Requirements (man-months):

	FY 74	FY 75	FY	After FY	Total
a. Professional	1	1			2
b. Special Services					
Total					

PART V. PROJECT SUMMARY
(Use Additional Sheets if Necessary)

1. Research Objectives:

Support basis for Bank Policy	4.	/X/ (minor)
Support for Bank Operation in Projects or Sectors	2.	/X/
Support for Country Economic Work	1.	/X/
Increase Knowledge of the Basic Development Process	3.	/X/
Develop Institutional Capacity for Research in LDC's	5.	/X/ (possible)

2. Description:

a. Problem

b. Method

c. Coordination

d. Implication for Bank Policy and Operations

e. Project Organization

(see attached)

(a) Problem

Assuming there is a close general relationship between industrial development and urban development, the most critical aspect of this relationship concerns industrial location. Thus, while the process of industrial development is concomitant with urban development, the geographic distribution of industrial development is a determinant of the geographic distribution of urban development, i.e., the evolution of the urban system.

Given this relationship our understanding of the dynamics of urban development can be enhanced by improving our understanding of the dynamics of industrial location, specifically, of location decision - making.

Recent urban development in Mexico has been highly concentrated. 1/ This is in part a consequence of the historical momentum which, within a framework of circular and cumulative causation, has carried into the 20th century an urban structure which has its roots in the geographic distribution of pre-Columbian settlements. It is also in part a consequence of the effect of incentive and disincentive policies on industrial location.

The concentration of economic activity and urban population in a relatively small number of states and particularly in the metropolitan area of Mexico City, resulted in a highly uneven geographic distribution of welfare. This features marked contrast between different urban areas within a general framework of strong disparities in living conditions between rural and urban areas.

1/ See "The Economy of Mexico: A Basic Report", Vol. II, paras. 116-119.

These contrasts have provided a focal point of economic policy during the Echeverria administration (1970-1976). Concern about them has been translated into an intention to redress the existing geographic imbalance in the economy and in particular to achieve a measure of what is referred to (sometimes ambiguously) as "urban decentralization". This reflects not only a concern over welfare but also reflects the concern that perpetuation of existing trends in the urban system would tend to exacerbate the pressure of population on the country's natural resource base, in particular, water.

Since 1970, the Echeverria Government has taken several initiatives which express these concerns and represent attempts to find solutions to the problems from which they arise. It has introduced legislation to provide incentives to industry to locate elsewhere than in the three major metropolitan areas (Mexico City, Guadalajara, Monterrey) and Nacional Financiera has established a Trust Fund for the development of industrial estates. But it is freely admitted by officials of both the Government and of public sector institutions, that there exists no clear basis on which policies which would alter the present trend of urban development might be established. There is, in particular, no real understanding of the factors which affect the industrial location decisions which in turn affect urban development.

This lack of understanding implies that the formulation of industrial location policies is rendered virtually impossible. Any coincidence between policy instruments on one hand and significant effects on the location decisions of entrepreneurs is therefore likely to be fortuitous.

In order to design policy instruments which would have a more precise bearing on location decisions, it is necessary to obtain an understanding of the factors which influence these decisions. The proposed research is intended to contribute towards the achievement of this goal.

(b) Method

Policies which are designed to affect industrial location must be based on a sound understanding of the factors which affect the pertinent decisions. In order to achieve such an understanding it is necessary to obtain empirical data concerning recent location decisions. Moreover, in order to assess the probable impact of future location policies it is necessary to obtain data concerning the probable reactions of decision-makers to the different types of policies which could be adopted in the future.

It is therefore proposed that the research be based on a survey of decision-makers and that the questions contained in the survey should focus (1) on past decisions and (2) future decisions. This survey should be based on a sample of entrepreneurs and should cover all parts of the country.

(c) Coordination

As far as we know this type of survey has not been previously conducted in a Latin American country. However, several studies of locational choice have been made in the United Kingdom and the USA (Brown, 1969; Townroe, 1972). These studies have generally focussed on a limited number of subsectors or on a limited geographic area. Townroe (1972) comments that while they have often been policy oriented, they have suffered from the weakness that "the location decision has been abstracted away from its context as part of a larger investment decision process".

The existing literature nevertheless provides certain insights into some of the methodological problems which may be encountered in this type of research. There is no reason why the lessons to be learned from these insights cannot be applied in Mexico.

The project is directly related to an urban sector study which is now being undertaken by the Bank and to another study which is being jointly sponsored by the Ministry of the Presidency and CEPAL/ILPES.

Preparatory work for the Bank study, which is a general survey of urban development in Mexico - the draft terms of reference for which are attached (Annex #1) - has already begun. The study will be focused on a mission which is scheduled for January 1974. One link between this study and the proposed research derives from the fact that while both are partly concerned with seeking to interpret past trends, the primary objective of each is to provide a basis for planning future development. More specifically, the general urban study will attempt to project a desirable and rational pattern for urban development in the last quarter of the 20th century and to suggest policies which would help to produce such a pattern. The proposed research should be seen as a basis for the detailed design of specific policies referring to incentives and disincentives for industrial location. If successful, the research should facilitate the task of constructing these policies in such a way that they would have the desired effects on locational behaviour. The research project would thus complement the work to be undertaken during the general urban study.

The relation between the proposed research and the Presidency/CEPAL-ILPES study is probably less direct. The latter is a regional study rather than an urban study. The question of coordination is therefore more critical in respect of the Bank's general urban study than in respect of the proposed research project. Those concerned with the general urban study will ensure that the former level of coordination is satisfactory.

(d) Implications for Bank Policy and Operations

The Bank wishes to have a clearer idea of future trends in regional and urban development in Mexico and of Government policies regarding these trends as a necessary condition of evaluating the geographic implications of Bank lending.[1/] It represents a general posture and refers to all sectors but it has a particular bearing on possible Bank operations in such fields as industry, transportation and urban infrastructure. The research project has a less direct relationship with this posture than the more general urban study. Given, however, that the latter study is closely related to the research project, there is an important indirect link between the two.

(e) Project Organization

Preliminary discussions about this research have been held with Lic. Leopoldo Solis of the Ministry of the Presidency which would be the appropriate Government department to coordinate any activity in the field of urban and regional planning. It is proposed that the research should be carried out under a contract of this Ministry, the cost of which would be financed by the Bank. Lic. Solis believes that the necessary research capability might be found in Mexico and, in particular, believes that the Technological University of Monterrey might be able to do this work. The

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1/ See memoranda to Files on Mr. Alter's Visit to Mexico, August 1973

Mexican Government would not however preclude the employment of a non-Mexican organization if the necessary expertise cannot be found in the country. Familiarity with Mexico would be an advantage in undertaking this research but familiarity with and experience of the methodology might prove to be more important.

There would be two stages. During the first (pilot) stage the methodology for the survey and in particular the questionnaire, would be tested. At the end of the first stage the methodology would be evaluated by the contractor in consultation with the Ministry and the Bank. Provided that methodological or operational problems arising during the first stage had been resolved to the extent that the prospects of success in the second stage appeared to be good, the second stage would be carried out immediately. It is envisaged that from the time a contractor was selected, a period of about one year might be required to complete the survey and to undertake the analysis of the results. The Ministry of the Presidency would be responsible for monitoring the work of the contractor. It is proposed however that regular progress reports should be provided to the Bank and that Bank staff should participate in the evaluation process at the end of the first stage.

Annexes

LI-ROCKEFELLER FOUNDATION
CC.OP-RESEARCH EDUCATION

February 20, 1974

Mr. Michael P. Todaro
The Rockefeller Foundation
111 West 50th Street
New York, N.Y. 10020

Dear Mike:

I came away from our meeting on education and development last week feeling that a good deal had been accomplished. I even felt that there was a more substantial acceptance of my proposal for a functionally-oriented rather than an institutionally-oriented study than I would have considered possible. I may live to be disappointed in the outcome but I will continue to be hopeful. Certainly, Dr. Molina's example of how people were trained for revolutionary development in Peru is the perfect illustration of my point.

The purpose of this letter, however, is not to pursue this theme but to remind you that I am expecting three documents as a result of our meeting:

(a) A revised work outline or scheme of operation for the study itself.

(b) A revised budget.

(c) The definitive version of the document we are expected to sign.

I am quite satisfied that Jim Perkins has given the Task Force adequate assurances regarding "a firm budget" and a firm deadline for the completion of the study. I see no serious obstacles in principle to the Bank's release of its share of the funds. Whether this will come in one or several installments I have yet to determine but I still think we can go ahead, subject to receiving the revised and definitive versions of the work plan and the budget. I hope you will understand that I am not simply trying to be tough about this but rather that in an organization like this, having been delegated to watch over this on behalf of McNamara, I need documents in our files which will clearly support and justify the expenditures we are making and not simply the preliminary drafts of such documents.

Summing it all up, it was a really excellent meeting and I came away feeling very good about the undertaking.

With best regards,

Cordially,

Duncan S. Ballantine
Director
Education Department

DSB:jsc

OP REFERENCE (ENERGY)

Coury's file

COURY and ASSOCIATES
6600 W. 13th Avenue
Denver, Colorado 80214

CONSULTANT, CHEMICAL ENGINEERING
GEOTHERMAL ENERGY
WATER: REUSE, DESALTING, DISPOSAL
ENVIRONMENTAL STUDIES

February 18, 1974

(303) 232-3823

Mr. E. Friedmann
Energy Advisor, Public Utilities Department
International Bank for Reconstruction and Development
1818 H Street, N.W.
Washington, D. C. 20433

Dear Mr. Friedmann:

Enclosed are three copies of the final report, "Status and Outlook of Geothermal Energy." It has been expanded in accordance with your comments at our meeting of January 16. In particular, Chapter 4 and Table 3 have been added to indicate various estimates of geothermal potential in several countries. Also, Chapter 6 has been expanded and Tables 4 and 5 have been added to increase the coverage of estimated costs. In addition, miscellaneous information that has become available since submittal of the draft report have been included.

I would like to point out the lack of firm estimates with respect to both the cost data and the evaluation of geothermal potential. This is discussed in the report and, of course, is in line with our conversations in your office. More suitable information with respect to costs can be obtained only by an extensive data gathering effort, so as to put the data from the various countries on a consistent basis. Better estimates of the size of the geothermal resource must await a more extensive exploration and drilling program.

Please do not hesitate to contact me should you have any questions or comments.

2/21/74
Friedmann
74-20

March 5, 1974
E. Friedmann

Sincerely yours,

Glenn Coury

Glenn E. Coury

Enclosures

OP - RESEARCH (CARD 720)

Dr. Clell G. Harral,
Chief, Transport Research Division,
Transp. and Urban Projects Dept.,
World Bank,
1818 H, Street, N.W.
Washington D.C. 20433
U.S.A.

SH/BH

Febr. 14th 1974

Dear Dr. Harral,

Thank you for your informative letter. The week of March 25 would be the best choice from my point of view. I'm allready trying to coordinate what is available of Scandinavian empirical evidence on tripmakers responses to alternative types and levels of user charges. Whether or not you are interested in diversion effects (cross-price and cross-time elasticities) with regard to public transport, you do not say in the letter, but unless you explicitly tell me that such cross effects are of no interest I'll include these as well in the paper I'll prepare and present.

I have now extra copies of the English abreviated translation of the Stockholm Area Transportation Study of 1971. Along with the Swedish version which includes the tables and figures not contained in the English version, this gives a good picture of that particular data set. I'll take these reports for you to keep in March unless you indicate an urgent interest and want them air mailed.

Another report worth mention concern the technical aspects of road pricing and was prepared by "Stakers Väg- och Trafikinstitut" in Stockholm by Etholm and Kolsrud. It is report no. 7 og 1972. If you are interested perhaps contact that institute directly.

How long (or brief) a paper should I write for the March workshop and how long and detailed a presentation would you prefer ?

As you understand your terms are acceptable since this promises to be a very interesting meeting. I am interested in investigating job opportunities with the Bank, but preferably from 1975.

I have checked with my travel agent and I'll have to leave Molde Saturday, March 23 for Oslo. Then on Sunday March 24 for London where I'll catch a non-stop flight (BA 521 or PanAm 107) to Washington DC.

Shall I prepare a complete flight schedule and let you book tickets and hotel room, or shall I leave this to my local travel agent and bill you later ?

If so please indicate a convenient place to stay while in Washington D.C.

I look forward to hear from you soon again and remain,

Yours sincerely

Stein Hansen
Asst. prof. of Transp. economics

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

D.P. Research / (Rural Electrification)

OFFICE MEMORANDUM

TO: Files

DATE: February 14, 1974

FROM: Dennis Anderson DA

SUBJECT: JAMAICA - Rural Electrification Program

1. This afternoon Jerry Warford and myself had a discussion with Messrs. Budhoo and Morrison of the Office of the Prime Minister of Jamaica and Messrs. Schaack and Bergeron of SORES Inc. (Consultants), about the study they are initiating of the cost and benefits of electrifying villages in Jamaica. The aim of the study is to set up criteria for selecting villages for electrification. The plan is for the Government and the Jamaica Public Service Co. to invest approximately $20 million in electrification over a 4 year period, commencing sometime later this year. To put this figure in perspective they said that the system of J.P.S. Co. is approximately 400 MW in capacity implying current assets of about 250 million dollars; the system is growing at 12 to 15% per year so that the proposed investment in rural electrification is only a moderate fraction of the total investment plan. (The per capita income of Jamaica is also about $450, population 2 million, 50% rural.) Apparently some of the larger villages with populations of 500 or more have already been electrified as part of a Bank loan in 1969. In addition there are a number of pilot rural electrification projects. A number of other projects such as feeder roads and village water supplies also form part of the Government's program of rural development.

2. The main questions were: What investment criteria should be used for rural electrification? How do we make demand forecasts? What are the important aspects of socio-economic appraisal? Apparently the IDB, who have been requested to finance the project, has only specified an accounting approach which is, of course, insufficient.

3. Our main recommendation was to study those villages which have already been electrified and to use the data from this as a basis for forecasting and for the socio-economic analysis. We also suggested using a rate of return calculation by comparing forecast revenues with costs. Where the returns are low, look at tariff policy. In addition they can make adjustments for shadow prices and surplus benefits. The adjustment for surplus benefits can be made for non-domestic consumers in much the same manner as we have made them in El Salvador. Apparently one of the big benefits is likely to be refrigerating bananas.

4. They said that they would contact me during the course of the study, which is intended to take no more than five months.

cc: Messrs. Rovani, Warford,
Jeurling, Sheehan,
Russell
Blue Book; Files

DAnderson:mds

OP-RESEARCH (EDUCATION)

Mr. D.S. Ballantine February 13, 1974

Jean-Pierre Jallade JPJ

Case-Study on Education Finance and Income Distribution in Brazil

1. I have just received from the Brazilian Institute of Statistics in Rio an estimate of the costs of producing the ad hoc Census tabulations which I need for my research piece on education finance in Brazil. The total operation will cost about US$22,000[1/]. This is certainly more than expected. But, after having asked the General Director of the Institute for some clarifications through the phone, it appears to be a fair price for the job.

2. I also require the services of a consultant for a period of about 40 days - some of which will be spent in Brazil - in order to spare my own time in the field. The costs of this contract are estimated at about US$6,500 including one round-trip ticket to Rio and travel allowances for about ten days.

3. All in all, the external costs of the case-study will be about US$28,500, excluding my own time. The funds allocated by the research committee to the study for the present fiscal year amounts to US$18,000.

4. Recalling our earlier conversations about the possibility of having department funds complementing Research Committee funds in some well-defined cases, I request that you consider the financing of the difference - namely US$10,500 - by this department.

Attachment: a/s

cc: Messrs. N. Erder (W/o Attachment)
R. Gomez (" ")

JPJ/nm

1/ A copy of both the tabulations requested to Census authorities and their estimate of the costs is attached for your information.

30 JAN. 174

cc OP Research
(Telecom

Mr. J. J. Warford February 13, 1974

Y. Rovani

EL SALVADOR - Rural Electrification Research
COSTA RICA - Rural Telecommunications Research

You will arrive in San Salvador on February 18 for discussions with members of the University team engaged in the rural electrification research project. Your specific task is to advise them on the treatment of financial data in the cost benefit and pricing studies.

After one day in San Salvador you will proceed to San Jose where you will join Messrs. Schkolnick and Lane in discussing with ICE and the Economic Research Bureau at the University the next stage of the rural telecommunications study. You will return to Washington on February 21 and complete a back-to-office report on the progress of the study to date.

cc: Mr. Dolenc

JJWarford:pjk

OP-RESEARCH (Population)

February 12, 1974

Mr. Robert Porter
ESCOR
ODA, Eland House
Stag Place, SW 1
London, England

Dear Mr. Porter:

I understand that Professor Scarlett Epstein of the Institute of Development Studies of the University of Sussex has submitted a research project, Population Growth and Rural Poverty, to ESCOR, with the request that ODA finance the 25% which remains, the Population Council having agreed to finance 50% and ourselves 25%. This is to confirm that we are very enthusiastic about the project, whose results we believe to be potentially of considerable significance to our own activities. We recognize that we lack a basic understanding of many of the determinants of fertility and so of how these might be affected by economic factors - an understanding we badly need to make the Bank's population projects more effective. Our analysis of the effects of population growth, and our activities to promote rural development should similarly be strengthened by the study of the impact of population growth on village economies, and especially how this has affected rural labor markets. I personally would have liked us to finance half of the project as the Population Council is proposing to do. Our research funds, however, are stretched extremely fully and we therefore must encourage Professor Epstein to find a third sponsor. I do hope it will be ODA.

Yours sincerely,

Timothy King
Chief, Population and Human Resources Division
Development Economics Department

TK:jln

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

QP Research

TO: Barend de Vries

DATE: February 11, 1974

FROM: Garry Pursell

SUBJECT: Case Study of Shadow Pricing in the Ivory Coast - comments on the shadow price of foreign exchange

I thought it might be useful to write down the comments I made during the discussion on this paper. These concerned the "conversion factor" for traded goods which is the coefficient applied to values expressed in domestic prices (net of TVA in this case) to give the estimated value in border prices. The paper estimates a coefficient of 0.99 which implies a practically zero premium for foreign exchange in the Ivory Coast.

I think this very unexpected and misleading result arises for the following reasons, some of which are rightly mentioned by Mr. Linn on p.3 of Annex 2 as needing further study.

(1) The marginal propensity to consume exportables, and particularly the main exports bearing export taxes (coffee, cocoa and logs) is probably very low or negligible. Hence these exports should be given practically no weight in the estimates

(2) In any case I think there is good reason to believe that the export taxes can be justified by inelasticity of foreign demand and in the case of timber also by the desire to slow down an otherwise excessively high rate of forestry exploitation. Hence the price minus the export taxes may approximate marginal revenue in foreign exchange

(3) Quota restrictions, specific duties and preferences are important in some cases and the average nominal protection to locally produced importables is probably higher than the average rate of duty on goods actually imported. In some industries in particular (e.g. textiles and clothing) non tariff barriers have led to a much larger de facto preferential margin than indicated by the official margin of preference in the tariff schedule.

(4) This raises a more fundamental question, namely to what extent imports from non-EEC sources are a real option for the Ivory Coast in view of the connection with France and EEC.

(5) Allowing for these qualifications would obviously make a large difference to the estimates. For example, if exports are left out, the consumption good conversion factor estimate would be 0.8 not 1.01 (i.e. a shadow exchange rate of 25 percent, equal to the assumed average tariff).

(6) The basic procedure of the draft OM is to convert all tradeables directly into border prices and consequently errors in the "standard conversion factors" applied "to minor non-tradeables or for the non-tradeables remaining after one or two rounds of decomposition" (Draft OM Annex p.43) may not be important. However the standard conversion factor for consumption (β) is important since it converts wages and salaries to the foreign exchange numeraire. For this reason I feel that the OM should give more emphasis to the provisional nature of the assumption that the income elasticities are unity (Appendix I p.8). For example in Appendix II I think it would be helpful to point out that in many countries exporting mainly primary commodities a much higher proportion of incremental income is likely to be spent on importables than exportables and that a correspondly low weight ought to be placed on exports in the formula. In the absence of consumption studies a common sense guess by the country economist will usually be better than automatically weighting exports and imports equally.

Distribution:

Messrs. Pellegrini
den Tuinder
Westebbe
Glaeser

Vaidyanathan
Chaudhri

de Azcarate
Linn
L. Squire
L. Goreux

For Information:

Messrs. van der Tak
Balassa
Baneth
Please

OR RESEARCH (URBAN LAND USE)

Mr. Yves Rovani February 11, 1974

J. J. Warford

KOREA: Urban Land Use Research Project
Back-to-Office Report

In accordance with terms of reference dated January 7, 1974, following my mission to Delhi, I proceeded to Seoul, spending the period January 20-23 with Mr. Grimes (of the Urban & Regional Economics Division of DPS) who is conducting a research project on Urban Land Use Policy. The objective of my visit was to examine the role that was actually, or could potentially be played by pricing of certain publicly provided services in influencing land use, to obtain information on the amount and quality of service available in different parts of the city in order to help explain variations in land values, and to define future research needs in this area. The findings of the mission will be fully reported in Mr. Grimes' final research paper.

In the short time available, I was only able to deal in any detail with water supply: an estimate was made of the incremental costs of water, and existing pricing policy was examined to see how it might be amended to influence land use within the city with a minimal amount of distortion in the rate of water consumption. The spatial unit of analysis in the research project is the gu, an administrative district of which there are nine in the city of Seoul, and information on variation by gu in the quality and extent of water supply facilities was collected.

Discussions were also held with transportation authorities. At present most intracity transportation is by bus: a subway system is under construction, and the private automobile is as yet a relatively insignificant means of transportation. Pricing policy for the bus system, the scope for congestion charges, and other restrictions on city center traffic were the main subjects discussed; information was collected on the time taken to commute to the central business district from various parts of the city, and on the frequency of bus services. Some suggestions are made regarding the way in which pricing policy could be employed to assist the city of Seoul in solving its transportation problem, and the implications for land use that are associated with this.

Water Supply

Apart from relatively small groundwater sources located in the northern part of the city, Seoul relies for its supply upon abstraction from the River Han. There are currently five intakes and treatment works, a sixth financed by ADB, is under construction and certainly one, and possibly two or three more similar facilities will be built to accommodate future consumption growth.

Incremental production costs, covering the ADB and subsequent projects, and incorporating both capital and operating expenditures are listed in Annex I, together with the estimated consumption resulting from those investments. Over a 25 year period, the average incremental cost (AIC) of water produced by these sources, derived by discounting both cost and output streams at 10% is 20 won/M^3.

In addition to a number of miscellaneous charges such as fees for connection and repairs, the average price per M^3 of water consumed by various categories of user in Seoul in 1972 was as follows:

Domestic	20.5 won/M^3
Business Class (1)	76.57
Business Class (2)	32.68
Industrial	34.24
Baths Class (1)	104.14
Baths Class (2)	22.95
Public Use	10.00
Special Use	20.0
Average	29.2

Since, despite the city's mountainous nature, differences in the cost of supplying consumers in various parts of Seoul are negligible, it is clear from the above that the price charged for domestic consumption approximates AIC. Other uses are priced in a way that diverges from AIC, this divergence being the result of discrimination on the basis of estimates of ability to pay and of the extent to which uses are for luxury purposes: baths, class (1), which include sauna and turkish baths, for example, are charged much more heavily than public use (standposts) and baths class (2) which provide basic washing facilities.

With respect to the relationship between water supply pricing and land use, the foregoing suggests that changes in pricing policy in order to influence population movement or to redistribute income between sectors of the city would best be achieved by leaving the charges per M^3 for domestic users much as they are, with perhaps the establishment of a two part tariff, the fixed element of which could cover those costs that are not marginal with respect to consumption. In order to meet the current financial requirements of the water supply authority, the 9 won difference between the AIC and actual charge per M^3 could form part of the fixed charge. In addition, other fiscal or income redistributional objectives could be achieved by variation - possibly by gu - in the fixed charge portion of the two part tariff, leaving the charge per M^3 consumed equal to AIC. Undoubtedly further analysis of industrial and commercial tariff policy would be warranted, the incidence of discriminatory charging being unknown.

The foregoing applies to the pricing of water for those consumers already connected to the water supply system. Given, as in Seoul, conventional financing procedures, where installation fees roughly represent actual installation costs, a powerful influence on land use is the extension or upgrading of the distribution network in an area. Since installation charges do not in practice recover the full amount of consumers' surplus accruing from connection to a system it can be expected that an increase in property values and therefore windfall profits to landowners in the area affected is likely to result from such investments. Since the influence of infrastructural improvement on land use depends on its supply price, variation by gu in installation charges and in the annual fixed charges for water supply could be an important instrument of control.

As far as the existing population in Seoul is concerned, Annex II, which inter alia shows the variation in the proportion of population in different gus who obtain household supplies, suggests that there is scope for affecting land use either by subsidizing or taxing extension of the water supply distribution network. In addition, of course, the provision of water supply infrastructure and the accompanying pricing policy will be of importance in determining the residential location of Seoul's rapidly growing population, as well as the siting of new industrial and commercial activity.

Transportation

Major features of the Seoul City transportation situation are as follows:

(a) 70% of all vehicular journeys originate or terminate in the central business district;

(b) 82% of all vehicular journeys are by bus, 3% by private car and 10% by taxi;

(c) 95% of all buses are privately owned, Seoul city operating the remainder; bus routes are allocated and fares established by the city, which itself operates a number of unprofitable routes. Bus fares do not vary with length of journey.

(d) A subway system is being developed, the first line due to open in August 1974. Fare policy has not been settled but fares are expected to be equal to present bus fares. The flat rate, of 30 won per journey, is expected to be sufficient to cover operating and maintenance costs and a satisfactory financial return on fixed assets. There are no plans for peak hour pricing. Details are being collected on incremental investment, operating and maintenance costs and predicted passengers in order that pricing policy can be more fully analyzed.

(d) There are at present no parking meters or other publicly imposed restrictions on the use of congested areas. With the exception of the First and Second Han Bridges, congestion is confined to the central business district.

Perhaps the most significant feature is the relative unimportance of the private automobile in Seoul, and it would seem that pricing of transportation and transport-related facilities has its greatest potential value in restricting the growth of private automobile traffic in the city center before it is (politically) too late. The introduction of parking meters, which is currently being contemplated, is one method, a surcharge on use of private parking is another. More sophisticated methods of charging for use of the core area in rush hours might also subsequently be considered. The general impact of such policies on land use would be complex, but presumably would result in the long run in some decentralization of economic activity, since the core area would become relatively less attractive. Subject to similar policies being applied to private automobiles, peak hour pricing for bus, subway and taxi transportation should also be considered.

The system of flat rates for bus and subway journeys obviously tends to favor residential location at the fringes of the city. With regard to commuting, the variables influencing the location decision are time taken to get to the city center and, for those who travel by taxi, the availability of taxis and fares (currently 90 won plus 20 won per 500 meters after the first 2 kilometers); for those who travel by car vehicle operating costs; and by those - the majority - who travel by bus, the frequency of service. It is not known when the case for fixed versus variable bus fares was last analyzed in Seoul, but any study of the impact of various public policies of land use should take account of this aspect, whether fares are consciously aimed at affecting land use or not. Given the flat rate fare system, the relevant variables influencing land use, namely time and frequency of journeys to the city center, are listed for various residential areas in Seoul in Annex III. A map showing their location has also been prepared.

Finally, the point made earlier with regard to the provision of water supply to new consumers applies equally to transportation facilities. In particular, the areas to be served by the first subway line have experienced large increases in land values. Recoupment of these windfall gains, or reduction in them, could be achieved by betterment levies, subway pricing policy or some combination of the two. There is no evidence that pricing policy is being consciously used as an instrument to control development in the areas served by the new line.

Conclusion

Whether used consciously or otherwise, pricing of public services is an important instrument in determining land use. With the possible exception of fixed bus fares, the impression gained from the visit to Seoul is that planners have not specifically considered the role of pricing in influencing residential, commercial or industrial location.

In this regard, a number of potential research areas have been identified, namely:

(a) the potential of the two part tariff for water supply;

(b) connection fees for water supply;

(c) distance-related versus fixed bus and subway fares;

(d) peak pricing for public and private transportation;

(e) the role of price in restricting use of the central business district by private automobile.

In all cases the general approach might be to determine what an efficient pricing policy would be from the point of view of those resources specifically employed by water, bus, subway, roadway (and power, telephone etc.) users; then to estimate how other objectives (e.g. equity, aesthetic or income distribution) might be incorporated in pricing policy. As in the case of financial or fiscal goals, influencing land use should be seen as an intermediate step in the achievement of these ultimate objectives.

JJWarford:pjk

cc: Mr. Grimes

SEOUL WATER SUPPLY: INCREMENTAL COST DATA

Year	Total Capacity1/ ('000 M^3/day)	Losses %	Daily Effective Capacity: Safe Yield ('000 M^3)1/	Daily Total2/ Consumption ('000 M^3)	Annual Incremental Consumption1/ (Million M^3)	Annual Operating Costs 1/,3/ (US$Million)	Investment Cost4/ (US$ Million)
1973	1620	39	988	765			5.8
1974	2070	37	1304	960	71	2.8	11.6
1975	2270	35	1475	1155	144	5.8	5.8
1976	2270	33	1521	1350	213	8.5	7.5
1977	2770	31	1911	1545	285	11.4	15.0
1978	3270	29	2322	1740	356	14.2	7.5
1979	3270	27	2387	1935	427	17.1	
1980	3270	25	3563	2130	498	19.9	
1981-95	3270	25	2452	2322	570	23.0	

1/ Due to investments 1973-78.
2/ Assumption: effective capacity pf project II fully utilized by 1981.
3/ US¢4/M^3.
4/ Plus replacement costs of US$2 million in 1984 and 1987.

ANNEX II

SEOUL WATER SUPPLY 1972

	Total Household	Total Population	Households with Water	Population with Water	No. of connection Total	Domestic	Business	Special	Industry	Public	Fire Hydr.
Total	1182655	6076143	976564(85.7%)	5290734(87.1%)	398153	359218	34444	1877	721	1893	2424
Jongro	37643	205844	35473(100)	205844(100)	22423	18077	3948	273	11	114	373
Jung	22159	125315	21440(100)	125315(100)	14568	8755	5537	261	5	10	310
Dongdaemun	155196	796068	148476(96.8)	741935(93.2)	54682	50443	3783	192	47	217	101
Seong Dong	177313	910922	132604(85.0)	797056(87.5)	55830	50677	4685	46	174	248	131
Seong Bug	219645	1109850	152773(69.5)	786883(70.9)	60795	57247	3095	147	62	244	61
Seodemun	169520	870696	148260(91.3)	797557(91.6)	58949	55086	3131	241	25	466	156
Mapo	71458	358806	63441(90.9)	358806(100)	34690	32366	2055	92	79	98	177
Yongsan	59014	301032	56341(100)	301032(100)	30946	27721	2833	303	18	71	961
Yeong Doung Po	270707	1397610	217756(90.0)	1098521(78.6)	65270	58846	5377	322	300	425	154

Seoul Municipality
Commuting Time & Frequency
Bus Transport

District	Origin	Destination in Downtown	Time Spent (min) R.H.	Time Spent (min) Non-R. H.	Frequencies (min) R.H.	Frequencies (min) Non-R.H.
Seong Bug	Chungneung	Kwangwhamun	49	37	3	6
	Woo-e-Dong	Chung Gae Chun No.2	43	33	2	4
	Sangia Dong	"	76	57	6	10
Seong Dong	Oksoo Dong	"	45	34	4:30	7
	Gui Dong	Eulji Ro No. 3	62	47	2	4
	Kwangzoo New Town	Chunggae Chun No. 5	79	59	3	6
Yeong Doung Po	Sihyung	Shin Shae Gae Dept. Store	60	45	3:20	6
	Kimpo	Central Govt. Bldg.	68	51	7	10
	Sadang Dong	Gwang Gyo	53	40	4	7
Galhyun	Bulgang Dong	Eulgiro Entrance	37	28	3	6
	Galhyun Dong	Kwangwhamun	31	23	5	8
	Yuk Chon Dong	Midopa	45	34	6	10
South Gaja	Namgaja Dong	City Hall	37	28	8	10
	"	Kwangwhamun	35	26	3	6
	Su Sack	"	43	32	4	7
Dabsibri	Dabsibri	Midopa	49	37	3	6
	Junong Dong	Euljiro No. 2	37	28	2:30	4
	Myunmok Dong	"	57	43	3	6

OP-RESEARCH (MIGRATION)

February 11, 1974

Dear Dr. Addo:

I am sorry for the long delay in writing to you about the proposed Migration Research in Western Africa. As you perhaps know, the OECD has agreed to allow Mr. Conde to go to Accra for four weeks and in consultation with you and Dr De Graft-Johnson, prepare a project with all the details. The Bank has agreed to finance his travel to Accra. I am sure that between the three of you, a good research project can be prepared during the four weeks when Mr. Conde will be with you. At the end of the period, Mr. Conde will return to Paris and as agreed by you when I met you in December, you will take up the proposal with local institutions in the respective countries. The Bank will meet the expenses connected with your trip to these countries if it is done before June. Please send me an estimate of the total cost. In case the dates suggested by Mr. Conde for his visit to Accra are not convenient for either of you, please write to him immediately suggesting alternate dates.

I hope that these arrangements are acceptable to you and that by the end of April we will have worked out a good research project of Migration in Western Africa acceptable to the countries concerned and prospective donors.

Sincerely yours,

K. C. Zachariah
Population and Human Resources Division
Development Economics Department

Dr. N. O. Addo
University of Ghana
Population Dynamics Program
P. O. Box 145
Legon
Ghana

CC. and Cleared with: Mr. T. King

KCZachariah:st

OP-RESEARCH POPULATION

Mr. Julian Conde

February 11, 1974

Timothy King TATK

Terms of Reference: Migration Research in Western Africa

As agreed to with Mr. Zachariah, you will proceed to Accra, Ghana, and around February 25 and during the following four weeks prepare, in consultation with Drs. N. Addo and De Graft-Johnson of the University of Ghana, a research project on Migration in Western Africa. Your proposal should cover all aspects of the project including statement of objectives, sampling scheme, schedules, personnel, cost, countries to be included, local institutions to be involved, etc. The schedules should include particular emphasis on the economic aspects of migration in the region--employment status, income, wages, remittance, time-lag between migration and first job, source of support during the period of unemployment, occupational mobility, etc.

On your return to Paris, you should send us a copy of your proposal. Copies should also be sent to Drs. Addo and De Graft-Johnson so that they can discuss the project with local institutions in the respective countries when they visit them.

CC. and Cleared with: Mrs. H. Hughes, Deputy Director, ECDPH.

cc: Mr. K. C. Zachariah
Dr. De Graft-Johnson, University of Ghana
Dr. N. Addo, University of Ghana
Dr. R. Black, OECD Development Centre, Paris.

KCZachariah:st

OA RESEARCH (POPULATION)

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: EPSTEIN
DEVELOPMENT BRIGHTON
SUSSEX

DATE: FEBRUARY 11, 1974

CLASS OF SERVICE: ~~FR~~ TELEX

COUNTRY: ENGLAND

TEXT:
Cable No.:

WORLD BANK RESEARCH COMMITTEE HAS AGREED TO UNDERWRITE REMAINING COSTS OF PROJECT ON THE UNDERSTANDING THAT EVERYTHING POSSIBLE WILL BE DONE TO FIND THIRD SPONSOR TO PROVIDE EQUAL SHARE THAT IS TWENTY FIVE PERCENT TOTAL COSTS STOP WE BELIEVE ODA IS PREFERABLE SOURCE STOP THIS WOULD IMPLY THAT FOR THIRD SPONSOR TOTAL WOULD BE TWENTY FOUR THOUSAND TWO HUNDRED NINE POUNDS OF WHICH NINE THOUSAND ONE HUNDRED SIXTY SEVEN WOULD BE IN 1974/75 COMMA TEN THOUSAND ONE HUNDRED TWENTY FIVE WOULD BE 75/76 AND FOUR THOUSAND NINE HUNDRED SEVENTEEN WOULD BE 77/78 STOP THIS IS BASED ON SIX PERCENT ANNUAL ESCALATION FOR INFLATION STOP RICHARD WILL CARRY BACK FURTHER DETAILS. REGARDS

KING

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME T. King

DEPT. Development Economics

SIGNATURE Timothy King
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: TKing:gc

CLEARANCES AND COPY DISTRIBUTION:

cc: Mr. D.C. Rao

For Use By Communications Section

Checked for Dispatch: SC

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Form No. 27 (3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION	INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: EPSTEIN
DEVELOPMENT BRIGHTON
SUSSEX

DATE: FEBRUARY 11, 1974

CLASS OF SERVICE: ~~FR~~ TELEX

COUNTRY: ENGLAND

TEXT:
Cable No.:

WORLD BANK RESEARCH COMMITTEE HAS AGREED TO UNDERWRITE REMAINING COSTS OF PROJECT ON THE UNDERSTANDING THAT EVERYTHING POSSIBLE WILL BE DONE TO FIND THIRD SPONSOR TO PROVIDE EQUAL SHARE THAT IS TWENTY FIVE PERCENT TOTAL COSTS STOP WE BELIEVE ODA IS PREFERABLE SOURCE STOP THIS WOULD IMPLY THAT FOR THIRD SPONSOR TOTAL WOULD BE TWENTY FOUR THOUSAND TWO HUNDRED NINE POUNDS OF WHICH NINE THOUSAND ONE HUNDRED SIXTY SEVEN WOULD BE IN 1974/75 COMMA TEN THOUSAND ONE HUNDRED TWENTY FIVE WOULD BE 75/76 AND FOUR THOUSAND NINE HUNDRED SEVENTEEN WOULD BE 1976/76 ANDP THIS IS BASED ON SIX PERCENT ANNUAL ESCALATION FOR INFLATION STOP RICHARD WILL CARRY BACK FURTHER DETAILS. REGARDS

KING

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: T. King

DEPT. Development Economics

SIGNATURE:
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: TKing:gc

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

Mr. D.C. Rao

1974 FEB 11 PM 8 58
COMMUNICATIONS

For Use By Communications Section

Checked for Dispatch:

OD-RESEARCH (MIGRATION)

February 7, 1974.

Dr. Lalit Deshpande
Economics Department
University of Bombay
University Campus, CST Road
Kalina
Bombay 29, India

Dear Lalit:

Greetings! I trust you have received a review of three books dealing with the labor markets which was published in the Journal of Economic Literature, and which I sent to Sandesara.

The primary purpose of this letter is to enquire about the current status of the study on migration, for which you and Jaipal had sent a proposal to the ILO. Mr. Ravi Gulhati, the Director of the Development Economics Department, whom you met some time last month, has brought a copy of the proposal which you must have given him. He has also indicated that we should examine the possibility of financing the study if the ILO is not able to provide the requisite funds.

The Division that could submit a proposal for this purpose to the Research Committee is indeed the one which includes Zachariah and myself. As you know, we are both interested in the subject, and would like to support it. Let me, however, seek your comments and reactions on a few points:

(a) Is the proposal given to Mr. Gulhati a revised version which takes into account the comments and suggestions, if any, made by Dr. J.N.Sinha?

(b) Would it not be better to use the 1971 census data to select the districts for survey? We are inclined to think that a comparative analysis of the 1961 and 1971 census data would probably provide you a basis to estimate k the volume of migration during the intercensal decade 1961-71, and thereby make it possible to select those districts from which there has been relatively recent large migration.

(c) Obviously, your response would be conditioned by the availability of data from the 1971 census. It is my impression that most of the tables on migration are based on the reported "last place of residence" rather than the place of birth, which was the basis to classify

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a person as a migrant in the 1961 census. (Of course, one table will provide you with data on the number of migrants according to the place of birth criterion). The scope for comparative analysis would be significantly enhanced if an attempt is made to exploit the tape of one per cent sample of the 1971 census.

Zachariah and I feel that it would be extremely valuable to attempt detailed tables, partly comparable to those compiled from the 1961 census and, in fact, to extend the scope for additional tables to include a wide variety of cross classification. Such analysis would be extremely useful also for the labor market project. To attempt a survey without using the 1971 census data would hardly be appropriate in 1974.

Could you let me know how you view the situation and whether the idea of obtaining a tape interests you. I had mentioned this project also in my letter addressed to Dr. Lakdawala, which was sent before Dipak Mazumdar visited Bombay. I presume you have seen the letter. As indicated in that letter, the Bank could provide the funds to obtain the tape. In fact, this could be done as a supplement to the labor market project. That would obviate the need for a separate sanction from the Government of India for the additional amount that may be involved. The precise tabulation plan can be worked out in due course, and Zachariah and I would be happy to share our thoughts with you.

(d) There is one other idea which you might consider. Do you think it would be feasible to select for your field work some of the villages from Ratnagiri, which were surveyed by me in 1967 and/or from Satara, Sangli and Kohlapur, which were surveyed by Zachariah in 1965. For Ratnagiri villages, the schedules are in the department. For the villages included in the survey undertaken by Zachariah you would have to collaborate with the International Institute for Population Studies. A re-visit to some of the villages could provide very valuable basis for examining the dynamics of population growth, employment and migration during the past 9 to 10 years. Such an analysis may be somewhat difficult but its value cannot be over-stated.

I shall appreciate if you will give some thought to the points made above and send me your reactions at an early date.

Please convey my best regards to all the friends in the department.

Yours cordially,

Pravin Visaria
Population and Human Resources Division
Development Economics Department

cc and cleared with: Mr. T.King

OP-RESEARCH (NORTHEAST BRAZIL HOUSEHOLD SURVEY)

RPO 299

Ms. Judith Tendler, Consultant February 6, 1974

Timothy King, ECDPH

Northeast Brazil Household Survey - Terms of Reference

1. On or about February 9, 1974, you are to travel to Brazil as a Consultant on the Northeast Brazil Household Survey Project (RPØ 299), returning to California, possibly via Washington, on or about February 26, 1974. During your stay in that country you are expected to collaborate with Messrs. Pasquale Scandizzo, of the DRCDP, and Eddy Kogut of the Getulio Vargas Foundation in pre-testing and revising a questionnaire dealing with certain socio-economic activities and dimensions in some 200 low income rural households in Northeast Brazil.

2. Within this broad objective, you should specifically provide advice and assistance in:

a) explaining the research and related objectives of the survey to our Brazilian counterparts and, particularly, to the interviewers and their supervisors;
b) amending the present version of the questionnaire, wherever necessary, to achieve the highest possible clarity of concepts and language for interviewers and respondents alike, in preparation for the late survey beginning in late March.
c) selecting the sample of households to be interviewed during the later survey and
d) planning the March field work.

3. You should bear in mind the concern of both the Bank and the Brazilian authorities that the Bank's activities at the Northeast are already imposing a heavy burden on the time of key officials, and do your utmost not to increase this burden.

TK

TKing:jln

LI FAO
OR RESEARCH

Mr. E. Grilli February 6, 1974

Wouter Tims

Terms of Reference: Attendance at FAO, Intergovernmental Group on Jute, Kenaf and Allied Fibers, Eighth Session, Rome, February 11-12, 1974 and Intensive ad hoc Intergovernmental Consultations on Jute, Kenaf and Allied Fibers, Rome, February 13-15, 1974.

You will proceed to Rome on Saturday, February 12, to attend the 8th Session of the FAO Consultative Group on Jute, Kenaf and Allied Fibers and the following ad hoc Session of Intergovernmental Consultations. You are not expected to take active part in the discussions of either group, but should be prepared to answer questions relating to the IBRD Working Paper 171, which will be distributed to the 8th Session of the Jute Group, and offer explanations concerning Bank policies on stabilization of commodity prices.

On your way back from Rome you are permitted to stop over in Geneva to discuss with International Technical Surveys the precise scope, methodology and time-table of their study on natural and synthetic rubber and to ascertain the conditions under which ITS would be prepared to make the study available to the Bank.

You are expected to be back in Washington on Friday, February 22. On your return you will prepare a brief back-to-office report on the highlights of both meetings.

Cleared with and cc: Mr. W. Singh

EGrilli:jl E.G.

O.P. Research

Messrs. R. Schkolnick and M. Lane

February 6, 1974

Yves Rovani Y.Rovani

COSTA RICA - Rural Telecommunications Study
Terms of Reference

1. On February 19 you will arrive in San Jose, Costa Rica to discuss with Mr. Marco Vinicio Tristan, Director of the Economics Institute the progress made in the above study in the light of the first progress report recently produced by the Institute.

2. You will make a field trip to observe how surveys are being undertaken.

3. Mr. Lane will return to Washington on February 22. Mr. Schkolnick will, if it seems necessary, stay in San Jose one more day to discuss with ICE his Third Progress Report on Urban Networks.

4. You will prepare a brief back-to-office report.

RS cc.and cleared with Mr. J.Warford JW

cc: Messrs. Vasudevan, Flood
Files

RS RSchkolnick:mds

OP - RESEARCH (RUBBER)

February 6, 1974

Mr. Alexander Jenkins
President, International
Technical Surveys
1 rue des Granges
Geneva,
Switzerland.

Dear Mr. Jenkins:

Many thanks for your letter of January 20, 1974, concerning the survey of new developments influencing the future competitive position of the natural and synthetic rubber industries. [We have gone over your research proposal and find it of considerable interest to us.] You may be perhaps concerned about the timing of your survey because the petrochemical feedstocks situation is undergoing such a rapid and sudden change that presently it may be quite difficult to get a balanced picture of it. It is clear, however, that insofar as your survey will concentrate on basic technical and economic relationships, the value of the exogenous variables (e.g., the price of crude oil) can be changed at will and the effects of such a change should be fairly easy to trace out.

We would be interested in knowing in some more detail the work that you have already done and what precisely you intend to do during the next 3-5 months. We would also need to know the precise conditions under which your company would be prepared to make the study available to IBRD.

Since our own work on rubber is moving on somewhat similar lines, consultations with you would be mutually beneficial. Consequently, I have requested Mr. Enzo Grilli, our rubber economist, who will be in Europe from February 11 to 22, to meet with you personally. He will call you from Rome and arrange a meeting with you in Geneva where he may stop over on his way back to Washington around February 20.

Best regards,

Yours sincerely,

Shamsher Singh
Chief,
Commodities & Export Projections Division
Economic Analysis & Projections Department

cc: Mr. E. Grilli

SW

EGrilli/SSingh:jl

INCOMING TELEX

OP RESEARCH (RPO 320) Logged Feb. 4, 74

LOG 31

RECEIVED

FEB 4 1 55 PM 1974

COMMUNICATIONS SECTION

file / Urban Workshop (new file)

FROM SINGAPORE

Distribution: Mr. Harral
Mr. Jaycox

INTFRAD 64145

MANOTEL RS21528

SECOND FOR HARRAL BRUNO KEEN FOR WORKSHOP AND AVAILABLE BASIS ASSUMING BANK REIMBURSES HIM EQUIVALENT OF HIS SALARY AND EXPENSES AND ROUND TRIP FROM SINGAPORE STOP PERHAPS YOU CAN MAKE BETTER DEAL WITH WILBUR IF YOU WATN TO TRY STOP BEST WEEK FOR HIM IS MARCH 25 SECOND BEST APRIL ONE NEXT BEST MARCH 11 AND FOURTH BEST MARCH 18. PLEASE WRITE HIM DIRECTLY WITH FULL DETAILS PROCEDURES AND ARRANGEMENTS STOP HE TRAVELS AGAIN FEBRUARY 25 AND EVERYTHING MUST BE SETTLED BEFORE THEN REGARDS HOLLAND

64145

MANOTEL RS21528

OP-RESEARCH (COSTA RICA TELECOMMUNICATIONS NETWORK STUDY)

February 1, 1974

Ing. Antonio F. Canas M.
Sub-Gerente General
Telecomunicaciones
Apartado 10032
San Jose
COSTA RICA

Dear Ing. Canas:

I am sending you two copies of the preliminary report on urban networks. With this report, the analytical part of the Costa Rica Telecommunications Network Study is completed. The costing of rural telephones has been left out of this study as it can be included in the Rural Telephony Study, now in progress.

I hope that I will be able to visit San Jose soon and hopefully will be able to discuss this report with your staff.

Very sincerely yours,

Raul Schkolnick
Public Utilities Dept.

attachment.

RSchkolnick:mds

cc: Mr. Warford
Blue book, Files

D.P. Research

February 1, 1974

Dear Dr. Black:

Thank you for your letter regarding Mr. Conde's availability for the CODESRIA Migration Research. On my return from Cairo, I spoke to Mr. King, our division chief, about my proposal to request Mr. Julien Conde to prepare a research program on Migration in the West African countries on behalf of CODESRIA. Mr. King is favourably inclined to the proposal, and he thinks that the necessary funds for Mr. Conde's travel and other expenses can be obtained from our resources.

My proposal is for Mr. Conde to visit Accra in February or March at his convenience and in collaboration with Dr. Nelson Addo and Dr. Graft-Johnson of the University of Ghana, prepare a research proposal with all the necessary details, i.e., the countries to be covered, local research institutions to be involved, statements of objectives, sampling scheme, schedule, personnel, cost, etc. When this draft proposal is ready, Mr. Conde can return to Paris. Dr. Addo and Dr. Johnson will visit the countries and make the necessary collaborative arrangements with the local institutions. We can then review the proposal and work out arrangements with CODESRIA for the implementation of the project.

If this proposal is acceptable to you, I will write to CODESRIA and Dr. Addo accordingly. Please let me know as soon as possible.

Yours sincerely,

K. C. Zachariah
Population and Human Resources Division
Development Economics Department

Dr. Robert B. Black
Head
Social Development and Demography Program
94, rue Chardon-Lagache
75016 Paris

cc and cleared with: Mr. T. King
cc: Mr. J. Conde

KCZachariah:st

LI-ILO
CC-OP-RESEARCH

January 31, 1974.

Dr. J.N.Sinha
WEP Research Branch
Employment Planning & Promotion Department
International Labour Office
CH 1211
Geneva 22, Switzerland

Dear Dr. Sinha:

Many thanks indeed for your letter of January 23, 1974, and the reprint of your paper.

I am writing primarily to enquire about the status of the two possible research projects submitted by the Department of Economics at Bombay for ILO funding. Mr. Ravi Gulhati, the Director of the Development Economics Department of which I am a part, was recently in Bombay and was given an outline of the migration project. I am not sure whether it incorporates any response to the suggestions you might have made when you were in Bombay. However, could you kindly let us know about the prospects of the ILO being able to provide the funds for the project? As you probably know, the World Bank has agreed to provide funds for a study of the informal sector of the Bombay labor market. Dipak Mazumdar has really been handling that project. It would be very valuable if the migration project can be linked up with the work that may be undertaken as a part of the Bombay labor market study. If necessary, we might even explore the possibility of making some supplementary financial contribution to the migration study. that may be funded by the ILO. While it is obviously not possible to make any commitments without going to the Research Committee of the Department, some of us have been thinking that it would be useful if an attempt were made to explore the possibility of detailed tabulations of the characteristics of migrants to Bombay on the basis of the one per cent tape of the 1971 census.

Zachariah and I also feel that it might be useful if an attempt could be made to re-interview households and some of the villages of ~~Ranikhet,~~ Ratnagiri, & Satara, Sangli and Kolhapur, which were surveyed in 1966 and 1965 respectively by me and Zachariah. It is not very often that one gets an opportunity to study the same village (after an interval of nearly 10 years) and the possibility should be explored. We recognise that tracing of the households which were there in 1965 or 1966 could be a laborious and time-consuming operation. However, it would provide an excellent means

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of examining the dynamics of migration flows over the past decade.

I look forward to hearing your reactions.

With best wishes,

Yours sincerely,

Pravin Visaria
Population & Human Resources Division
Development Economics Department

PV:bnd

OP-RESEARCH EAN Files

Mr. K. Bulutoglu - Dev. Econ. January 31, 1974

Ved P. Gandhi

Benefit Taxes versus User Charges in Project Financing

1. Your paper on the above subject has been passed on to me by Mr. Stanley Please for my comments.

2. While I fully agree with you on the importance of reseárch on the subject of user charges I must confess that I have not been enlightened by your paper as to what the specific direction or methodology for this research should be. As a matter of fact the paper as it stands now reads no more than an excellent answer to a graduate examination question relating to the relative merits and demerits of various forms of benefit taxation. Your paper would no doubt be useful to anyone who has never been a student of public finance and I do realize that you intended it to serve only as a "background paper" rather than a sketch of how the future research on the subject should be planned.

3. As I have stated at the very outset there is definitely a need for research on this subject. In fact I believe that it is overdue. I say this because in my experience I have found that very often projects people in the Bank, lacking any well-reasoned and sufficiently researched guidelines, are carried away by their personal biasses and prejudices relating to individual user charges. Such a situation obviously calls for a remedy. In addition, in many countries, and Tanzania is a good example here, pricing of various public and social services is often seen as an important instrument of resource mobilization. I would, for example, be soon looking into this in Tanzania and would certainly welcome any guidance you or your Division could give me in this regard.

4. Theoretical generalizations on user pricing or benefit taxation apart, I believe that specific public services and specific circumstances should call for specific recommendations. This would suggest that it would be better for research purposes to focus on one or two major services which in practice have been found to be amenable to and desirable from the point of view of pricing. It is probably this approach which lay behind the Walters/Churchill study and which concentrated on road user pricing exclusively.

5. In the present context we could perhaps focus on exploring the possible bases for "pricing" many services which are provided under our rural development projects. The importance of this area to my mind lies in the fact that many governments providing production and community related services to agriculture would soon be finding, if they have not already found so, that resources are a crucial and binding constraint on their capacity to expand these services in the rural areas. Uma Lele in her study on Africa Rural Development has clearly spelled out this problem (pp. 24-26) and I would suggest that a few case studies on selected service pricing in the existing rural development projects (and Uma's study can become a useful stepping stone for this) could give us a clue as to the nature, magnitude and constraints on which we could later

build an economic analysis of this particular set of public services.

6. Should you be interested in this formulation of the problem I would be glad to collaborate with you personally in such a study.

cc: Messers. Stanley Please
Oktay Yenal (o/r)
Shanker Acharya
Shlomo Reutlinger
Mrs. Uma Lele

VPGandhi:ebw

OP-RESEARCH

Mr. R. Picciotto thru Mr. H. Vergin | January 31, 1974

H. T. Chang

Research - Intermediate Technology for
Better Post-harvest Grain Handling and Storage

As requested, I submit the following list of research topics of intermediate technology for your transmittal to CPS. I believe that the outcome of these researches will be of great help to a very large number of Asian small-farmers whom the international assistance has not been able to reach so far.

(a) Improved method of sun-drying paddy--Even if Asian countries introduce mechanical driers as quickly as their financial and technical capabilities permit, tens of millions of farmers will still be sun-drying their paddy for many years to come. The mechanical driers available on the market are of fairly large units. The smallest driers (requiring fuel) being developed by IRRI are of one to two mt capacity. I discussed the need of developing better method of sun-drying paddy with IRRI in August, 1973. IRRI has agreed to conduct experiments on it in Philippines and Vietnam.

(b) Hand operated Winnower--Poorly winnowed paddy brings low price because the mills have to winnow them before milling. Even more importantly is that when used as seeds for the next crop, it results in high percentage of weak seedlings, an ununiform stand and low yield. IRRI has developed a small powered winnower suitable for use by small rice mills. Hand operated winnowers used by farmers in Taiwan and Korea, made of wood, are very clumsy. Small farmers in many countries are still "winnowing" by holding and moving a bamboo tray in the wind.

(c) Farm grain storage--70% of the population of many Asian countries are rural; thus only 30% of the paddy and rice move through the commercial channel. The bulk of the paddy is stored in farmers' houses. So far improved versions of grain storage are larger ones for commercial units or public warehouses. If small low-cost units that individual small farmers can buy or build could be developed, much loss of paddy due to insects, mold, rodents and moisture could be saved.

(d) A technology for small farmers to dry their feed grains (corn, sorghum, soybean, etc.), and same for drying seeds of these crops.

(e) Facilities and methods for small farmers of the tropical monsoon Asia to store their seeds of these crops. Seeds of corn, sorghum, soybean, peanuts lose viability quickly in the hot and humid climate. Poor germination accounts as one of the basic reasons of poor stand and low yield. Even if a country has a going seed project, a national seed project usually supplies only one-fifth or one-fourth of the total seed requirement in the country, on the assumption that farmers are to renew for certified seeds once in every four or five crops. It is extremely important to find means for the four-fifth or three-fourth of the farmers, when they wait for their turn, to keep their own seeds better.

HTChang:yp

OP-RESEARCH (EDUCATION) FEB 18

FUNDAÇÃO IBGE

FEB 18

PR/ 51

Rio de Janeiro, GB
January 30, 1974.

Mr. Jean-Pierre Jallade

Education Department
International Bank for
Reconstruction and Development
International Development Association
1818 H Street, N.W.
Washington, DC 20433, USA

Dear Mr. Jallade,

This is in reply to your letter of November 19, 1973, which refers to a request for a few additional tabulations based on the 1970 Census.

After having examined the feasibility of providing you with the tabulations in question, I inform you that the job can be accomplished within a term of 3 (three) months, at the following costs:

a)	if carried out only for the State of Pernambuco	Cr$ 68 235,88
b)	if carried out only for the State of São Paulo	Cr$ 77 876,39
c)	if carried out only for Brazil, as a whole	Cr$ 129 024,67
d)	if carried out for the States of Pernambuco plus São Paulo plus Brazil	Cr$ 135 589,57

I shall look forward to hearing from you at your earliest convenience, in order that your request be carried out.

Sincerely,

Eurico de Andrade Neves Borba
GENERAL DIRECTOR

Tel 252-3501

For the rest of attachments to this memo, please see Mr. Jallade's letter to Mr. Kerstenetzky (Nov. 19, 1973)

001 06/2 7 577

FUNDAÇÃO IBGE

Rio de Janeiro, GB
January 30, 1974.

Mr. Jean-Pierre Jallade
Education Department
International Bank for
Reconstruction and Development
International Development Association
1818 H Street, N.W.
Washington, DC 20433, USA

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b) If carried out only for the State of São Paulo	Cr$ 77 876,39
c) If carried out only for Brazil, as a whole	Cr$ 129 024,67
d) If carried out for the States of Pernambuco plus São Paulo plus Brazil	Cr$ 135 589,57

I shall look forward to hearing from you at your earliest convenience, in order that your request be carried out.

Sincerely,

Eurico de Andrade Neves Borba
VICE-PRESIDENT

COMMUNICATIONS SECTION

1974 FEB 15 AM 11:09

RECEIVED

O.P. Research (Telecom.)

Mr. Yves Rovani

January 30, 1974

J. J. Warford & C. Vasudevan

INDIA: Economic Analysis in Telecommunications

1. In accordance with terms of reference dated January 7, 1974, I visited New Delhi from January 15 - 19 to join Mr. Vasudevan in discussions with the Indian P&T Department on the subject of economic analysis in telecommunications.

2. Meetings were mainly held with officials of P&T, namely Messrs. Shenoi, Ranganathan, Raman and Katoch. We also met Mr. Ganguli, an economist on the staff of the Planning Commission and Mr. Chakravarthy, also an economist, who is the member of the Planning Commission with responsibility for Transport and Communications.

3. P&T, prompted by our meeting during negotiations and by subsequent correspondence, had already decided to employ an economist in their planning unit, but were awaiting our visit before acting on recruitment. They were in particular keen to obtain more precise details from us as to what we thought should be the major tasks of the economist.

4. We agreed that, broadly defined, the task of the economist should be to assist the development of cost-benefit analysis in telecommunications. This would consist of two major elements. The first, stemming from the observed reluctance of many budgetary authorities to invest in telecommunications despite relatively high financial (and therefore economic) rates of return, concerns the need to supply information of a qualitative nature on telephone usage to supplement the financial information already available. Having determined the nature of telephone usage, attempts would then be made to quantify this in economic terms. A considerable amount of empirical work would be involved, and could usefully start at the rural level for three reasons:

(a) in contrast to the highly profitable inter- and intra-urban services, it is not always clear if rural telephone services are economically (or socially) justified,

(b) methodologically it would be much easier to begin with rural telecommunications; however the object would be to develop a methodology that could be applied to more complex markets, and

(c) the current emphasis in the Bank and elsewhere on rural development.

5. The second major element, to be developed in parallel with the first, is the analysis of tariffs. We agreed that because of the technical complexity of telecommunications, it would be essential for the economist

to work closely with P&T engineers. Analysis of tariff policy would stem in part from the benefit identification and measurement work referred to earlier. It would also be based in part upon the cost analysis being carried out by P&T engineers.

6. We explained that the Bank's interest in the formation of an economic unit in P&T was concerned not only with the improvement of decision making in the Indian telecommunications sector, but also with a desire to advance the art of telecommunications economics generally. At the outset we would act in an advisory capacity, indicating to the P&T economic unit the state of the art as we saw it, outlining the questions that need to be answered, and pointing out some of the difficulties we have encountered in applying accepted economic pricing and investment theory in the telecommunications field. We also informed them of efforts that were being made elsewhere to improve our knowledge of telecommunications economics, and stated that we would like to act as a clearing house for information on developments in this area.

7. It was agreed that it was premature to decide upon specific research projects. The recruitment of at least one economist to work in P&T was the first task and was promised within the next two or three months. The survey work necessary for the analysis of telephone usage, which would best be carried by a university, would have to be supervised by the P&T economist. It was suggested by Mr. Chakravarthy that a Professor Chaudry, a transport economist currently on leave from Delhi University at the University of Minnesota would be the best person to advise on recruitment and to assist as an advisor. We agreed that it would be advantageous to arrange for Professor Chaudry to visit us in Washington where we could brief him on the issue.

JJWarford:pjk

OP-RESEARCH (TELECOMMUNICATIONS)

(RPO 276)

January 29, 1974

Mr. Marco V. Tristan
Director
Universidad de Costa Rica
Instituto de Investigaciones
Escuela de Ciencias Economicas
y Sociales
Costa Rica

Dear Mr. Tristan:

I am just writing to acknowledge receipt of your report and letter of January 21. The report has now been sent for translation, and I will contact you again as soon as I have had a chance to read it.

Mr. Schkolnick will telephone you regarding our visit as soon as we feel able to make firm plans. It will be a very short one - only two days or so - and may be a few days later than originally planned.

As to your proposal that factor analysis be used to analyze the data on village characteristics, I would not encourage use of this approach, preferring rather that you start from demand theory and test hypotheses: moreover, please do not hesitate to use a descriptive approach if you feel this would be valuable. Having said this however, I will see if I can bring down any of the references on factor analysis that seem appropriate and, while I do not think that this technique should be a significant part of the study, you might find it instructive to let a graduate student practice its use on our data. Finally, if after our discussions in February you still feel that further advice on factor analysis might be useful, one of my colleagues, Mr. Anderson, will be in Central America at the end of February, and could stop in Costa Rica for a day to talk to you about it.

Congratulations to you on your new appointment. I wish you every success with it.

Looking forward to seeing you in a couple of weeks.

Yours sincerely,

J. J. Warford

JJWarford:pjk
CONTROL NO. 74-15
cc: Mr. Schkolnick

OP-RESEARCH

THE UNIVERSITY OF MICHIGAN

SCHOOL OF PUBLIC HEALTH

ANN ARBOR, MICHIGAN 48104

DEPARTMENT OF POPULATION PLANNING
CENTER FOR POPULATION PLANNING

January 25, 1974

Mr. Robert McNamara
President
The World Bank
1818 H Street, N. W.
Washington, D. C. 20433

Dear Mr. McNamara:

I am pleased to accept your invitation to prepare an analytical paper discussing the UN, the World Bank, and the population problem. I hope the paper will contribute to the effectiveness of the United Nations family in dealing with the issue of rapid population growth.

Very sincerely,

Jason Finkle

Jason L. Finkle
Professor of Population Planning

JLF/jc

Mr McNamara

OP-RESEARCH

January 25, 1974

Dr. Tetteh A. Kofi
Assistant Professor
Food Research Institute
Stanford University
Stanford, California 94305

Dear Dr. Kofi:

I have read your letter of January 17, 1974 addressed to Mr. Shamsher Singh in which you discuss your progress on data processing for the Cocoa Study. While we appreciate the work that has already been done, we think that progress has been too slow. The slippage from the originally designed schedule has become rather large so that we find ourselves pressed against the deadline for the paper to be presented to the Board. For example, according to your terms of reference the draft of an integrated report was originally scheduled for mid-November, 1973. Also a report on your mission to West Africa covering data problems was to be submitted on or before October 1, 1973. However, none of these progress reports has been received so far.

I must impress on you again that the DRC method has been adopted from the very start of the project; otherwise we would have had no basis for formulating questionnaires. In your letter you mentioned that you are gravitating towards developing other models, although you are still keeping the DRC method in mind. While we appreciate your additional thoughts put into the study, time simply does not permit us the luxury of experimentation with other methodologies for the purposes of this study. We would therefore appreciate from you a first report on your findings using the DRC method by February 11, 1974. Because of the time constraint, those findings might very well become the basis of our paper to the Board.

We urge that you comply with this request.

Sincerely yours,

WT

Wouter Tims
Director
Economic Analysis and Projections Department

PYeung:mb
PY

OD-RESEARCH
CC: LI-OECD/DAC
CC: OD-LIAISON

Mr. David Wall - ECDND January 23, 1974

Vinod Prakash - ECDND VP

Terms of Reference: Mission to India to Continue Work on Indian Export Policy Project

1. On or about February 7, you will leave for India for a period of about seven weeks. You will work in collaboration with V. Pande of the Research and Analysis Division of the Trade Development Authority (TDA) of the Government of India. Together with Mr. Pande, you will supervise and participate in the program of interviews of firms as specified in the contract between the Bank and the TDA dated November 19, 1973, and undertake any other work needed to complete the project.

2. While en route to India you will stop over in Bangkok and Manila. In Bangkok you will hold discussions with the team of researchers at the Economic Cooperation Center of the Asian and Pacific Council who are engaged in a study of export incentives in Asia. In Manila you will hold discussions with the team of researchers conducting the USAID-financed Michigan/Philippines project on export development and promotion policies and compare notes with them on methodologies being used for firm level field interviews.

3. You will return to Washington via Paris and London. In paris you will attend the OECD Development Centre-Joint DAC/LDC Meeting on Export Promotion, March 25-28 as an observer. In London you will meet with Messrs. J. P. Hayes and B. D. Jayal of the Commonwealth Secretariat, discussing recent developments in EEC trade policy treatment of India with the former and the newly established Commonwealth Secretariat export promotion program in India with the latter.

4. On your return, you will prepare a report on the proceedings of the Paris meeting. The material collected on this mission, together with the report prepared by the TDA under the contract mentioned above, and materials collected on previous missions, will be used to form the basis of a research paper on Indian export policy.

c.c. and cleared with Mrs. H. Hughes HH

cc: Messrs. E. Kraske - SAS2B
N. Segal - SAS2B
Mrs. S. Boskey - IRD
Messrs. W. Gilmartin - India
J. Saxe - EPDIE

VPrakash:dvh

Livestock / Ag Research
OP-RESEARCH

January 23, 1974

Dr. Yoav Kislev
P.O. Box 12
Rehovoth
Israel

Dear Dr. Kislev:

Further to my letter of January 3, I must now report that the Bank's experts on livestock and on agricultural research have reviewed your proposal, and have recommended that the Bank not finance it. Their opinion is that the data you would propose to gather would be applicable only to Israel, and that broadening the study to include another country would be very expensive. I am afraid that their support is essential to any possibility of Bank financing.

If you would like to submit a preliminary proposal on extension and dissemination of information, I would be glad to circulate it for comment within the Bank staff to see whether it is or could be developed into something we could fund.

With best regards,

Sincerely yours,

Charles Weiss
Science and Technology Advisor

CWeiss:ps

bcc: Messrs. Rao
Stoops
Fransen

R.Z. S-5
cc UP DESTARNO

Mr. Samir S. Basta January 22, 1974

Clell G. Harral CGH

Terms of Reference: Substitution of Labor for Equipment in Civil Construction - Health and Nutrition Study - India.

You will arrive in Delhi, India, on January 30 via London, in order to discuss and review the proposal from the All India Institute of Medical Sciences for the Health and Nutrition survey on road workers in Northern India.

Your discussions with the Institute will also be carried out in conjunction with representatives of the Border Roads Commission, and those from Scott Wilson and Co., engineering consultants to our labor substitution study. You will cable us of your conclusions regarding the study design, and if it is adequate and falls within the time span specified by Scott Wilson and Co., you will proceed to the field sites in order to coordinate and advise the field teams, especially in regards the productivity measurements.

Upon your return to Washington, you will write a brief back-to-office report. When the final study report is received from the All India Medical Institute, you will examine it and inform us of your conclusions.

SSBasta:mcp

OP-RESEARCH

January 22, 1974

Dr. Erwin Laszlo
Department of Philosophy
State University of New York
Genesee, New York

Dear Dr. Laszlo:

I read with interest your revised proposal, dated November 1973, for a study on "Conditions of Global Community." The revised draft states your intentions much more clearly than did the first draft, on which I have already commented. However, it is still subject to the following fundamental criticisms:

1. The disaggregation of the world into geographical units is delayed until the second phase of the project.

2. The choice of geographical units does not follow economic logic.

3. The omission of prices as a regulatory mechanism obscures the likely course of events as the world bumps against the finite supply of some resource at a particular time.

   In the short run, the resource would not be allocated according to any standard of human need, but would simply go to the highest bidder. Thus foodstuffs go to feed animals to produce high-priced meat, not to starving Indians. Since income elasticity of demand for meat is high, rising affluence shifts more and more food stuffs into meat production. And since, from the point of view of human nutrition, it is much less efficient to feed wheat to animals than to eat it directly, the poor suffer very quickly when supply is limited. A similar argument can be made for oil.

   In the long run, the supply of the commodity will expand as the price rises, and demand may drop. This price system is imperfect and has many built-in time delays, but you can scarcely ignore it completely. In the real world, then, there is no such thing as meaningful GLS for energy, living space, health, education, or environmental quality - at least not in developing countries, where most of the world's population lives.

4. The amount of food, health, educational services, communication services, and raw materials available is a function not only of technology but of funds available and allocated for investment in these sectors. A lot more food would be grown and made available to poor people in developing countries if it were public policy there that this should happen.

5. The problem with the Forrester-Meadows Study was not, as you suggest, the professional controversies it spawned. These were to be welcomed and expected from any seminal paper. Rather, the publicity accompanying the publication of the study was completely inappropriate to the conclusions of a pioneering, first, crude attempt at global modelling. I would certainly hope that you do not plan to unleash a similar propaganda barrage on behalf of halfbaked policy conclusions. The time will come when global modelling will make important contributions to policy. Why ruin the reputation of the field by premature ballyhoo?

A few specific points:

a. There are, I suspect, many more military dictatorships and single-party states than there are either Western democratic or Marxist Socialist societies.

b. I urge you to "read the fine print" of estimates of global resource reserves. It is easy to put them to uses for which they were not intended, as we pointed out in detail in the Bank Task Force critique of the Forrester-Meadows paper.

Finally, you are quite right that global energy policy should be subjected to global modelling. So should foodstuffs. But your study of these problems will be a waste of time and money if it repeats the mistakes of the Forrester-Meadows study by ignoring the workings of the price system and lumping the world together into grossly inhomogenous units.

Sincerely yours,

CW Jr

Charles Weiss, Jr.
Science & Technology Adviser

cc: Mr. William C. Moore

OP-RESEARCH

Mr. Stokes M. Tolbert

January 22, 1974

Doreen E. Calvo DEC

The Effects of Tourism on Local Populations

1. In response to your request, I have spent a small amount of time thinking about a possible research project into means to mitigate the adverse effects of tourism on local populations. I am suggesting two parts: i) questions to be explored and ii) operational conclusions.

Part I: Questions to be explored

2. As I see it, the following are at least some of the pertinent questions that might be explored in the study:

A. Is the type of tourism important? What are the effects on the local population of receiving visitors of

i) roughly similar income levels and cultural backgrounds;
ii) dissimilar income and cultural backgrounds;
iii) a different race;
iv) a different language.

B. Is the size of tourist traffic in relation to physical space and/or to local population important? If so, can a ratio between the resident and the tourist population and a maximum tourist density be determined that would maintain social harmony.

C. Does the i) visibility or ii) invisibility of tourism affect local people negatively or positively, i.e. under what conditions are the reactions of local people adverse or positive as between luxury, enclave tourism and more diffuse, middle-income group tourism?

D. Where tourism is accused of provoking negative reactions in local people, are these mainly because of economic, cultural, social or human factors? A preliminary list of causes might include

i) economic: increased land prices in tourist areas; increased wages in tourism that make traditional occupations unattractive (e.g. agriculture, domestic service); increases in the regional cost of living (through availability of imported goods);

ii) cultural: the adoption of a role of servitude by local people to tourists may recall degrading relationships from the past;

./.

iii) social: where unemployment and extreme poverty are the norm in the tourist destination, locals may become discontented and unsettled by tourists and their affluence;

iv) human: does a person away from his normal environment and on holiday tend to have a behaviour pattern which may be abrasive and/or likely to corrupt local people?

Part II: Operational Conclusions

3. These should consist of recommendations, based on the previous analysis, that suggest ways and means to design a tourism project, under the different assumptions discussed above, that would eliminate possible sources of tension between the tourist and the local resident.

cc: Messrs. P. Glaessner, J.A. Simmons, A. Odone

DEC

DECalvo:caf

OP RESEARCH (TELECOMMUNICATIONS)

RPO 276

UNIVERSIDAD DE COSTA RICA
Ciudad Universitaria "Rodrigo Facio"
Costa Rica, América Central

INSTITUTO DE INVESTIGACIONES
ESCUELA DE CIENCIAS ECONOMICAS Y SOCIALES

Enero 21, 1974

Date Received: 1/28/74
Assigned to : Mr. Warford
74-15
Action Taken : Jan 29
By

Mr. J. Warford
World Bank
1818 H Street N.W.,
Washington D.C. 20433,
U.S.A.

Dear Mr. Warford:

First, I have to apologize for the delay in sending you this report. Though I offered Mr. Schkolnick to send it last week, most of my time was - taken to prepare the nationwide concessionaires survey during the last - fortnight. Besides I have been appointed director of the Research Institute in substitution of Mr. Naranjo who is now the Dean of our Faculty. So I am taking possession of my new job.

Generally speaking the project is going well. We have had the natural problems and delay that arise from a research project of this kind. I think the report explains with some detail what these problems have been.

Now we are trying to define with precision the data we need from the potential and effective telephone users. As you may see from the report, we changed the dates for the users pilot survey. The change was done with the purpose of writing down a sort of theoretical model that presumably - will give us the variables we must measure from the users.

We are thinking about the possibility of using "factor analysis" (principal components method) to give operational use to the general data we are collecting from each of the villages with rural telephone. Though we are aware of the limitations of such a method we believe it is the best we have. Anyhow it would be of a great importance if an expert on econometrics or related topics can give us advise about this matter. In the report I pointed out that, besides the data we are collecting from the concessionaires and they from the actual users, we are also collecting - data on several characteristics (social and economic) of the villages served with rural telephony. We need a sort of index reflecting differences in the level of economic and social activity among the villages. Factor analysis might be the appropriate technique. Apart from the help World Bank experts

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FORM NO. 337.04
(12-69).

or RESEARCH

IBRD LANGUAGE SERVICES DIVISION	
CONTROL NO. E-1010/74	DATE: January 18, 1974
ORIGINAL LANGUAGE: Portuguese (Brazil)	
DEPT. Dev. Research Center	TRANSLATOR: JC/ch

SURVEY OF AGRICULTURE IN THE NORTHEAST - 1973

MANUAL OF INSTRUCTIONS FOR INTERVIEWERS

GENERAL INSTRUCTIONS FOR USING THE QUESTIONNAIRE

The interviewer must read the questionnaire carefully and thoroughly understand it before trying to use it. Any doubts he may have concerning the questionnaire must be cleared up preferably during his training period, or at a later date by his supervisor. The general instructions and those concerning the individual tables will help the interviewer to obtain an overall understanding of the questionnaire. These instructions must be assimilated before the start of the interviews, and we recommend that the interviewer review them periodically so as to keep them at his fingertips.

For this research project to succeed, every interview must yield information of the highest possible quality. In the same way, the results will be valid only if the questionnaire is used in exactly the same way on all the farms visited. All interviews are equally important, and not one of them may be carried out without proper attention to accurate detail. In order that the desired results may be obtained, it is necessary for all the staff involved in the survey to commit themselves totally to the project at all times. It is particularly essential to the success of the project for each supervisor and interviewer to take the maximum interest in this research effort and to maintain a constantly high standard of efficiency.

Do not suggest replies to the interviewee

Perhaps the most important general instruction is: get the information from the farmer without suggesting the reply. This point can never be stressed enough, and it is recommended that the interviewer accept it and agree with it completely.

Admittedly, compliance with these instructions may seem difficult for many or all of the interviewers who have technical experience in the agricultural sector. They will naturally feel inclined to use their knowledge in solving the farmer's problems, and during the course of the interview may be tempted to come to his assistance when he is having difficulty with a relatively complicated question. To be perfectly frank, we decided to use experienced agricultural technicians as interviewers (and not students, for example) for the very reason that their knowledge will be extremely useful in helping them to understand the questions contained in the questionnaire and to present them to the farmer in a form and language that he in turn will understand.

We are also aware that experience is an essential asset to an interviewer (a) in helping him to rephrase the question when it is clear that the interviewee did not understand it in its original form; (b) in helping to stimulate and sharpen the farmer's ability to provide replies to technical questions to which he is possibly being exposed for the first time in his life (as for example those questions contained in the second part of the questionnaire); (c) in helping the interviewer to analyze the farmer's replies and translate them into the form and content required by the questionnaire;

(d) in helping him to note any technical inconsistencies in the farmer's replies so that he can ask him to clarify or take back conflicting statements. These are all things that the interviewers are entitled and encouraged to do, and in this way their technical knowledge and experience can contribute to the success of the study. However, in order to achieve such success it is essential that they refrain from suggesting replies, as this would make them both interviewer and interviewee at the same time. Obviously, if the interviewers were allowed to suggest replies there would be no need to take this survey of the farmers and the questions could just be asked of the interviewers themselves.

We realize that if the interviews are to be carried out as described above a longer period will have to be allowed for collection of data, but from the point of view of the survey, this additional cost will be more than offset by the quality obtained.

Translation and reformulation of technical terms

Another important recommendation is that the interviewer familiarize himself immediately with the interviewee's environment and decide how best to adapt the questions to the latter's technical and cultural level.

It is pretty obvious that the structure of the questionnaire is highly technical and that the terms used are frequently unknown to the farmers. For this reason, the headings of the different tables and columns must not be read to the interviewee in the form in which they appear in the questionnaire but must be accurately translated into equivalent expressions with which the interviewee is familiar.

It will often happen that even the direct questions in Tables 1 and 2 cannot be asked in the form in which they are printed and will need to be reformulated. It is difficult to give a complete list of the everyday equivalents for the technical terms contained in the questionnaire, since they may differ from one region to another. We list a few examples that will give the interviewer an idea of the way he should proceed:

1. Labor: type of workers and number of days worked.
2. Improvements: construction work or [two other equivalents for "improvements]*.
3. Equipment and implements: tractor, plow, harrow, etc.
4. Single crops: [three equivalents for "single crops"]*
5. Mixed crops: crops planted together or [equivalent of "mixed crops"]*.
6. Livestock: cattle.
7. Cows in milk: cows giving milk.
8. Land operated directly: land worked by paid labor, without a share-cropping arrangement (parceria).
9. Cultivation: cleaning, hoeing or pruning.

This is just a sampling of the expressions that need rephrasing. The interviewer must know the questionnaire very well before trying to use it and, in each region, he must pay special attention to the expressions that he will have to use during his interviews with the farmers.

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*T.N.: In each case marked with an asterisk, the Portuguese terms differ from each other but can really be given only one valid English equivalent, as shown in the brackets.

The measurements problem

It is well known that the units of measurement routinely used by the farmers are not the same as the metric measurements used in the questionnaire.

Also, these units vary considerably and change from one region to another and possibly from one municipality to the next. This means that the interviewer must first of all make himself fully conversant with the units used by the farmers in a given municipality and then be able to convert these rapidly into the units given in the questionnaire.

To ensure that each interviewer in charge of a municipality is consistently correct in recording measurements, the first few hours of his first day of work in that municipality must be spent in gathering information on all the possible units of measurement used in the area and their metric equivalents. In this way, a simple conversion table can be prepared and distributed to all the interviewers, thereby obviating inconsistencies among them. In the case of fruit and vegetables, where the local usage is to refer to the unit and the questionnaire asks for the weight, the interviewer must estimate the average weight.

Each supervisor must ascertain that only one metric conversion table is used by all the interviewers in the same municipality.

Interviews with owners and sharecroppers (parceiros).

This survey and study differ in many respects from other recent studies of agriculture in the Northeast. One of the chief differences consists in the fact that we shall be interviewing both owner-farmers and sharecroppers-farmers (when the land is operated under a sharecropping arrangement).

The questionnaire has been prepared with this dual target in mind. A rapid glance at the type of questions asked will show how necessary this is. For example, the technology used by sharecroppers on lands operated under a sharecropping arrangement is not known in detail by the owner.

In cases where all or part of a farmer's land is operated by sharecroppers, a sampling of the sharecroppers will be selected for interview on the same questionnaire. Rules for the selection of these sharecroppers are set forth in another part of these instructions.

<u>Completion of the questionnaire</u>

As will clearly be seen, the questionnaire has been fully precoded, the aim being to eliminate the time consumed in transcribing the information collected in the field onto different sheets for punching onto IBM cards. This means that after the supervisor has checked the questionnaire it will be sent directly for punching. For this reason, <u>the interviewer must write completely legibly, using a No. 2 pencil</u>. Fountain pens and ball-point pens are not permitted. Also, when variable numbers have to be placed in the appropriate boxes, they must all be placed to the right, so that the last digit coincides with the last box in the space provided.

Example: 1378 must be written $\boxed{\ }\boxed{\ }\boxed{1}\boxed{3}\boxed{7}\boxed{8}$ and not $\boxed{1}\boxed{3}\boxed{7}\boxed{8}\boxed{\ }\boxed{\ }\boxed{\ }$

A dotted line in a box means a decimal point. Example: $\boxed{\ }\boxed{\ }\boxed{\ }\boxed{\ }\vdots\boxed{\ }\boxed{\ }$

We find this line when information is required on areas (ha) and prices (Cr$). For example, if the interviewer has to write 17.3 ha (sic) in this space, the number must be written as follows [| | | 7¦3 |] , with the whole number immediately to the left of the dotted line and the decimal to the right of it. Any other way of writing this number is wrong and will cause the information to be recorded totally incorrectly, leading to errors of calculation and analysis.

When a cipher has to be entered, meaning that the item does not apply to the farmer, a zero must be placed to the right: [| | | 0] .

Property and establishment

The target of this study is the agricultural production unit in the Northeast, which we shall call the establishment. This is defined as the technical and economic unit managed by the farmer. This unit (or establishment) may be the same as a given property or may represent an association of more than one property, the land being leased or operated without the possession of legal title thereto. For this reason, we are not interested in the property "per se". Since there is no list of establishments for a sampling to be selected, we have to use the list of properties contained INCRA's Land Register for 1972. This is the only reference to the concept of property. After identifying a farmer who owns his land, we shall complete the questionnaire in respect of his establishment and not of his property, in accordance with the instructions for Table 2A.

Other general instructions

The interviewer must read the following additional instructions and follow them when using the questionnaire.

1. The questionnaire is divided into two parts. Part I requires replies from all the owner-farmers or sharecroppers selected at random, or from substitute establishments named on a reserve list supplied to the interviewer. Part II requires replies from a sub-sampling of the main sample. The interviewer will receive instructions as to when to take Parts I and II to an agricultural establishment.

   When Part II is to be taken to an establishment where the Part I questions have already been asked, the answers to Tables 0, 2A, 5, 7, 9 and 12 of Part I shall be written into the respective tables in Part II at the office before the interview.

2. As soon as the interviewer arrives at an establishment, he should see the person in charge or his assistant. Before starting the survey, the interviewer should do everything possible to win the confidence of the interviewee by starting up an informal conversation. Later he should describe the goals of the survey in general terms that the farmer will understand, asking the latter for his cooperation. He can say that the aim of the survey is to guide the Government in drawing up programs for improving agriculture in the region and in taking steps that will benefit the farmers. To do this, the Government needs to get a clear picture of the situation, hence the need for answering this questionnaire as accurately as possible.

If an establishment visited by an interviewer cannot for some reason be interviewed, he must try to get his interview on another day. Should he not succeed, he must interview an establishment on the reserve list.

3. The interview must be conducted without hostility and with a minimum of tension and anxiety. Go along with the interviewee's wishes concerning the venue for the interview, but suggest that the best place would be the office, the house or any covered area where there are chairs and a table. If no such place is readily available, go ahead with the interview without losing your enthusiasm or vigor.

In some cases, the interviewee may be too busy to be interviewed - then you should ask if there is anybody else who can answer most, if not all, of the questions. If this is impossible, you must ask to come the next day, if convenient, in order to complete the questionnaire.

4. All the questions on the questionnaire must be asked at each establishment. No question may be omitted. In order to prevent accidental omission of a question or table, the interviewer must take the questions in numerical order and must make a note beside any question or table that is irrelevant or inapplicable or to which the interviewee is unable to reply.

If the absence of a reply to any question is not approved by the supervisor and/or coordinator, the interviewer will be obliged to return to the establishment a second or third time to collect the missing information.

To avoid having to make these return trips, the interviewer must ask the questions in a systematic and careful manner. It is recommended that he not hasten the interview or let it drag or become boring, as the interviewee might then lose patience and interest. The interview can be conducted most efficiently when the interviewer is completely familiar with all the questions and can go from one to the next without any difficulty or delay.

5. At the end of the interview, the interviewer must thank the interviewee very warmly for his replies to the questions and repeat that the questionnaire is completely confidential, explaining that it will, together with 5,000 other questionnaires completed by other farmers in the Northeast, be used by the Government as a basis for planning the agricultural development of that region.

6. All the questionnaires must be returned to the interviewer's supervisor when completed, for checking and criticism. This should usually be done at the end of each working day.

Table No. 0

Title: Frontispiece

The data to be collected on this page are divided into two parts. The first part, to be coded, serves: (a) to identify the establishment as to its location in a given state (1) municipality (2,3) and within the sample (4,5,6); (b) to identify the interviewer (7,8) and supervisor (9,10) and date of the interview (11, 12, 13, 14, 15, 16); (c) to identify the total number of IBM cards used to record the data contained in the questionnaire. The interviewee is not required to answer any questions on this table. The total number of IBM cards for the questionnaire will be filled in by the supervisor.

The second part of the data contained on this first page, which will not be coded, services (d) to evaluate the conditions in which the interview was held (person(s) interviewed, length of interview and any comments) and (e) for internal control purposes.

With respect to item (d) the name of the person(s) interviewed (who may be someone other than the owner) must appear in the designated space. On the large farms, it may sometimes happen that the owner will provide the data on its general structure but will have the manager or his "right arm" reply to some of the more detailed questions. All this is very likely to happen, and in such cases the interviewer must be very careful to check that one person's replies are consistent with the other's. The name and function [of each respondent] and number of the tables replied to by each person must be given in the appropriate space. The data in respect of "internal control" do not require the interviewee's participation.

The "coordinator" will give the final "okay" to the questionnaire, and must mark the appropriate box before sending the questionnaire for punching.

<u>Table No. 1</u>

<u>Title: General Information</u>

Items 1 through 6 identify the property selected in the sample and its owner. <u>They are not questions and will be completed before the interviewer leaves the office.</u>

In order to obtain an accurate idea of the total area operated as a production unit by the interviewee, the interviewer must right away fill in line 1 (and only this line) of Table No. 2A. In this way he will obtain data on the type of production unit with which he is dealing and will immediately know whether the area indicated in item 6 is anywhere near the total area indicated on line 1 of Table 2A. To find out how to fill in line 1, see the instructions to Table 2A.

Whenever the interviewer has to complete questions such as for example Nos. 15, 16 and 17, in which he has to classify the farmer's replies within the options for each question, he must first try to get the farmer to reply without suggesting any of the options to him.

If the farmer cannot give a specific reply, the interviewer may try to help him by indicating some of the options, but must at the same time make sure that the farmer's choice of option is a genuine reply to the question and not just a way of getting around it.

Questions Nos. 17, 18 and 19 also apply to a farm where animals (cattle) are raised, so that the price of milk and beef will influence the decision on whether or not to expand the area with pasture.

Question No. 21 requires a reply only in the event that the reply to Question No. 20 is affirmative. The interviewer must ask the farmer which are the three months of the year, in order of importance, when labor is the most scarce.

Table No. 2

Title: Land use - transactions

This table is designed to gather information on the purchase and sale of land by the owner between January 1972 and the date of the interview. January 1972 was taken as the starting date because the most recent INCRA Register takes 1971 as its base year. Information on leased pastures will also appear here.

Other information included in this table refers to the use of purchased land and to possible difficulties encountered by the farmer in expanding his cultivated area.

Special attention must be paid by the interviewer to the collection of data, where appropriate, on the price at which pastures have been bought and sold and on the rent charged on leased pastures.

If the pastures used by a farmer belong to a friend and he does not pay rent, do not ask what the rent is but make a note to explain why the box has not been marked. Note that a common form of pasture leasing is not only in terms of area (number of ha) but also in terms of "number of head per month". When this type of agreement exists, the information regarding the rented area and the "number of head per month" must be obtained. Questions Nos. 11 and 15, "total value of lease" refer to the amount in Cr$ received or paid by the farmer, and may be computed as (A) number of head of cattle per month, times Cr$ per head/month, times number of months leased, or as (B) number of ha times Cr$ per ha, if the agreement was not drawn up in terms of head/month. If the rent is to be paid in the form of goods (produce) ask the farmer to estimate the value of such produce.

Table No. 2A

Title: Land use. Type of activity

This table describes: (a) the total composition of the land making up the establishment by class of legal title and by type of lease (columns); (b) land use by category of farming operation (lines 1 through 11), and (c) an estimate of the different land values (including improvements) (line 12). The data shown in this table must be collected as follows:

Line 1 must be completed first, i.e. the interviewer must start off his interview with the farmer by asking him the total area of the "establishment" and not of the "property" (note that we are speaking of "establishment" and not of "property"). The reason is that we are interested in the structure of the production unit managed by the farmer and not only the land parcel that he legally owns.

Therefore column 1 (line 1) will show the area of the property, whether the title thereto is permanent, in process of permanent registration, or whether it is part of a decedent's estate. Generally speaking, the area of the property should be equal to the area shown in INCRA's Land Register for 1972, (see Item 6 of Table No. 1). But it can also happen that the actual area will differ from the area recorded because (a) it was registered incorrectly, (b) it has increased (or decreased) since December 31, 1971 (the base year for the Register) or for other reasons. In this case the interviewer will ask the farmer to explain the difference, taking care to make the necessary explanatory notes.

It may be that the farmer interviewed holds legal title to another property close to the land selected in the sampling. In this case, the interviewer must note and fully comprehend the sign (**) at the foot of Table 2A and act accordingly. If, for example, a farmer owns two farms in the sertão 30 km apart but has transferred or intends to transfer animals from one to the other during 1973 (as and when pastures are available), these farms must be regarded as forming a single production unit (establishment), and the area of both farms must be recorded.

Obviously, the area of one property will be the one selected in the sampling and will appear in the first column. The area of the other property goes into the second column.

In the same way, the farmer interviewed may be the lessor and/or lessee of a parcel of land operated under a sharecropping arrangement. This parcel will then be entered in column 3. Lastly, land occupied without title goes into column 4.

The next four columns (5, 6, 7 and 8) establish the division of all the available land (columns 1, 2, 3 and 4) into four categories: (a) operated by direct management (b) operated with sharecroppers (c) given to tenants (moradones) for family use only and (d) leased. In this point information will be obtained for each line only, for columns 5, 6 and 7 (sic).

"Operated by direct management" is understood to refer to that part of the establishment that is operated by the farmer with paid labor (day-laborers and/or regular payroll).

"Operated with sharecroppers" refers to that form of operation of the land whereby the farmer and the worker(s) divide operating responsibilities and also divide the product of their operations. In this case the wage for work done is not paid in cash.

Special attention must be paid to the names used locally to designate a sharecropper. Some times -in the sertão, for example- the tenants may be at the same time "on the payroll" and "sharecroppers". They are on the payroll when they perform work on the farm for which they are paid a daily, weekly or monthly cash wage, and they are "sharecroppers" when they share the yield of certain crops and the work they have put into these is not paid for in cash by the farmer.

The farmer will frequently call those workers who perform these two functions "tenants" and will not use the term "sharecroppers". Thus, when asking the farmer about "sharecroppers", it is not sufficient to ask whether he has sharecroppers working on his land (whom he may call "tenants"), but whether some (or all) of the cultivation operations are carried out under a sharecropping arrangement on a "half", "third", "fourth" basis, etc.

"Operated with tenants" refers to the land parcel given by the owner for the exclusive use of the families of the tenants. In hectares, this will generally vary from 1 to 2 per tenant, but in establishments where tenants are numerous (20 to 30), the total portion of the establishment used for this purpose may be considerable. For example, in the Mata (forest) Region, such parcels can account for up to 25% of total land in the agricultural property. For this reason, we shall deal separately with the data relating to this type of management.

When only one crop occupies an area, it is known as a "single crop". When more than one crop is planted in the same area this is known as "mixed crops". In certain areas, considerable attention must be paid to the collection of information on "single" and "mixed" crops. In the Mata Region for example, where sugar cane predominates, if the owner or mill operator is asked whether he has "mixed crops" he will probably say no. However, on his plantation there may be several tenants to whom he has given a small tract of land (say around 1 ha) where they together plant "mixed crops".

Information on this land must be obtained and recorded in Table 2A, since it constitutes a substantial part of the establishment (25% or more of the total area).

The "Planted Pastures" cover all the types of crops listed in the "code of planted pastures" beside Table No. 5. "Native Pastures" are all the lands used for grazing (including catingas) that have not been directly planted by the farmer.

"Operated "forest" includes only that part of the area which is being operated in 1973 for the cutting of wood and logs for use on the property or for commercial purposes and which is consequently of economic significance. In the sertão it is common to find the tenants removing logs from the catinga area used as native pasture, in which case the area must be classified as "native pasture" and not as "operated forest".

"Reforested areas" are all the reforested lands existing in 1973. "Area with improvements" is the land around the farmhouse, employees' houses, roads, dams, etc. It may constitute a substantial part of the agricultural establishment (10% or more) and must be carefully considered in the collection of data for this table. "Area with improvements" does not refer to total built-up areas but to structures (m^2) and land added on to the improvement such as patio, yard, etc.

"Fallow lands" are those usually included in a system of rotation but which in 1973 are not being used for the planting of any crop or for grazing.

"Unworked lands", which could still be worked, are all lands which are not included in the above categories but which could be used for agricultural purposes.

"Lands unsuitable for agriculture" are residual lands that cannot be used for agricultural purposes (too stony, barren, etc.)

In the space for column 7 (sic) (leased to other parties) and line 12 (estimated value of the land) the interviewer must write down the value of the lease and not the value of the land. If the price of the lease is paid in goods the farmer must give an estimate of the value of such goods.

Table No. 3

Title: Improvements - Installations existing in the establishment in 1973

The "Description" column must give the name of the improvements. The column for Code A must show the code number corresponding to each improvement.

In the column headed "capacity" the interviewer must write the capacity of each improvement in units as specified in Code A. In the event that an establishment has 50 tenants' houses, of which 20 are 40 years old, 12 are 15 years old and 18 are 2 years old, this information must be given on 3 separate lines. When the ages are very similar, or the farmer cannot remember the exact age, an average figure on a single line will suffice. In order to compute the capacity of a dam or reservoir, the interviewer must ask what are the average width, length and depth, and make the necessary calculations. An alternative means of calculating capacity, if the depth given is the maximum (or portion)* will be to arrive at the average depth by dividing the maximum depth by 2.

Each improvement will be characterized by the type of structure corresponding to Code B and will be placed in the appropriate column. The total estimated value of the improvements may be one of 2 types of estimate: the first type is the "total market value" if the improvement is of recent date, and the second type refers to an older type of construction, in which the "total cost of reconstruction" will give a better idea of the value of the improvement. The type of estimate will be indicated in the appropriate column.

Table No. 4

Title: Inventory of equipment and implements

The "description" column must show the name of the equipment and implements. The column headed "Code of equipment and implements" must refer to Code C for each item described.

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*T.N.: Meaning of "or portion" not clear.

The column for Code D must show the characteristics of the equipment and tools in terms of power, capacity, etc., while the next column (9, 10, 11) contains the units of the different characteristics as specified in the code. In the case of an irrigation complex (sprinkler system) (Code 29) the most simple thing will be to consider the complex with its motor and pipes.

"Age" and "Useful life" of the equipment are very important items and must not be omitted from the form.

The farmer may have bought second-hand equipment, in which case "age" will be calculated as being the total number of years for which it has been owned by the farmer, plus the years for which it was in operation before he acquired it.

The two value columns must be completed as follows: Priority must be given to the collection of data on "total present value". This is the value that the owner could obtain if he were to try to sell the equipment at a reasonable price on a competitive market. If this figure is obtained, there is no need to ask the original value.

If the interviewee cannot state the present value, the interviewer must collect information on the original value of the equipment. He must approach this question of value cautiously and skillfully, taking care not to suggest the reply to the farmer or to pressure him too much. The interviewer must be patient, letting the farmer come to his own conclusions.

If the equipment was a gift, then its value must be estimated.

Table 4 continues with questions concerning the hiring of equipment. If the equipment is hired it is necessary only to note the number of hours and days for which it is being used and the price at which it was hired.

Table 5

Title: Crops and pastures - Production: Operation during the 1973 crop year

The purpose of this table is to give information on the production of all crops, including pastures, grown and harvested in the agricultural establishment visited, whether cultivated with permanent and temporary labor or under a sharecropping arrangement, or whether they are tenants' crops.

However, the interviewer must keep the data relative to direct management separate from those relative to sharecropping operations and to tenants' crops.

In order to achieve this objective it will be advisable to start out with the crops planted directly by the farmer.

Code 1 in column 1 means that the crops are grown this way (direct management). Then the information on "sharecropping operations" will be collected and Code 2 will be written in Column 1. Lastly, the information on crops planted by the tenants for themselves will be collected and Code 3 placed in column 1.

The following instructions relate to the collection of data for each type of crop:

First of all write down the name of the principal crop on line 1 under the heading "Crop Description". Then write down the code for the crop using columns 2 and 3, finding the appropriate code number in Code E. If the crop is one of a mixed group, put down 01, using columns 3 and 4. Other mixed cropping operations will be called respectively 02, 03, 04, etc. (see example on the next page of this manual). The heading "Age of Crop" (columns 6 and 7) applies only to permanent crops; for annual crops these spaces must remain blank. These spaces should be used to show the harvest year of the crop concerned.

The column headed "Type of Crop" shows whether this is a normal crop, tended in the normal way, or whether it is "abandoned". This distinction is necessary in order to determine the entire production of any one crop on a farm. An example will clarify this point. In the sertão, mocó cotton is often grown for up to 4 or 5 years, following which the area is abandoned to spontaneous vegetation, which in time turns into catinga. However, the cotton is not pulled up and continues to produce (though yielding less, of course) even without being tended at all. The only attention it receives is when the fiber is picked, and this, depending on the area, may be considerable. In one case, a farmer who usually produces 20,000 kilos of cotton, was able to pick 2,000 kilos in these abandoned areas. Another crop that can be harvested in the same way ("Abandoned Crop") is the castor-oil plant.

Boxes 9 to 14 are to be used to show the cultivated area in ha. Remember that a decimal point is indicated by the dotted line separating boxes 12 and 13 (sic). Use these spaces only to specify less than one hectare under cultivation. Use spaces 15 to 20 to indicate the estimated number of hectares harvested or to be harvested in 1973, or even later, as in the case of cassava, if the product can remain in the ground until the weather is suitable for harvesting.

The reason for this column is that, often owing to different causes (floods, labor shortage, etc.) the "area harvested" is smaller than the "cultivated area". Since we are interested in relating the quantity produced to the area in which the product was actually grown, this information is necessary. For the quantity produced here are two columns, "Quantity Harvested in 1973" and "Estimated Quantity Remaining to be Harvested". These two columns are necessary because when we started the survey not all the crops had been harvested. For example, in the sertão, the first cotton harvest will be over, but the second and third will probably not be. In the Mata region, the sugar cane harvest may have started but will probably not yet be over. Cassava can be left in the ground for harvesting at a later date.

The total quantity produced in relation to the 1973-74 crop year is of interest and must be obtained and noted. In the case of pasture for trampling (sic) there is no quantity produced.

The next two columns will be used only for crops grown under a sharecropping arrangement. The first shows data on the quantity owed by the sharecropper to the owner, in accordance with the terms of the arrangement (half, fourth, third, etc.) The other column serves to collect data on possible sales of his shown share by the sharecropper to the owner.

Should the establishment grow more than one combination of mixed crops or should the same principal crop -differing only as to age- be planted in the same combination, then use additional lines to specify the different combinations of crops and/or ages of principal crop. All crops, including these and/or pastures, must be shown in this table.

Example:

Description of Crops and Pastures	CROP CODE	NUMBER OF GROUP	AGE OF CROP
Mocó Cotton			
Beans (Feijao de arranca)			
Common maize			
Mocó cotton	(For figures please see page 19 of original)		
Beans			
Common maize			
Mocó cotton			
Cassava			

Table No. 6

Title: Production: Distribution of production on the establishment during the 1973 crop year

The purpose of this table is to identify the distribution of the yield of all the crops grown on the establishment and available to the interviewer during 1973. For example, if the interviewee is the owner of a farm, the quantity to be distributed is the quantity produced directly, plus the portion due to him under any sharecropping agreement, plus any quantity sold to him by his sharecroppers. If the interviewee is a sharecropper, the quantity to be distributed will be his own [share].

It should be noted that in this table we are using the same "crop code" as for Table 5, but in this case the code must be interpreted as "Code of Crop Yields". In this way one line is sufficient to contain all the relevant data on one crop. This is a little different from Table 5, in which one crop can take up more than one line. However, in the case of the same product (sugar cane, for example) being sold at different prices depending on its use (sugar, sugar candy, aguardente), each use (with a different price) must be placed on a different line.

The column headed "For Processing" refers to that part of the product that is set aside for processing on the establishment, as for example, sugar cane for aguardente or for candy, cassava for flour, etc. The quantity given in this column will appear in greater detail in Table 8. The title of each other column is self-explanatory.

Table No. 7

Title: Livestock Inventory and Hiring of Draft Animals

This table gives information on the structure of the herd. The titles of the various columns are self-explanatory and there appears to be no need for special instructions.

Table No. 8

Title: Production Processed in the Establishment in 1973

The information on processed products appears in this table. Note that among these products we include such items as milk and poultry, which are not processed in the strictest sense.

This table will be used to collect data on the processed products of the owner, the sharecroppers and the tenants. To distinguish the products according to these types of management, the first column "type of management" will be used, in accordance with the distinctions given in the footnote to the table.

If an owner with sharecroppers and/or tenants is interviewed, the quantity of goods produced by the sharecroppers and tenants will be placed in the last column "production of sharecroppers and/or tenants". If a sharecropper is interviewed, this last column will not be used.

Lastly, it should be noted that products such as beans, maize, and sorghum - although they require some small-scale processing (shelling, husking, etc.) - are not included under "Processed Products). They must be mentioned in Table 6. On the other hand, sisal must not be mentioned in Table 6 but must be included in Table 8.

Table No. 9

Title: Labor by type of job and category

This table contains information on labor employed in 1973 by category. It also describes the type of payment to the various workers.

Note that "Permanent Employees" refer to workers who are paid by the week or the month but who are on the permanent payroll of the establishment. This heading also includes tenants but not sharecroppers. "Temporary Employees" are day-laborers, workers on short-term contract who are generally employed in critical periods of labor shortage for cleaning operations, harvesting etc. "Sharecroppers" also include tenant-sharecroppers. "Total Annual Pay" is worked out at the office.

When the employee receives goods, the value of these will be shown in column 3. If the goods received do not depend on the number of days worked (e.g. milk delivered every day) their value will be shown in column 6. Note that house, land and medications should not be contained in this column 6.

Table No. 10

Title: Use of labor - Temporary workers and sharecroppers' obligations

This table collects data on temporary labor and how it was used all year. This type of information is very important for the goals of the survey, and special efforts must therefore be made to obtain it.

It is possible that in many cases the farmer will be reluctant to answer questions relating to this table, but the interviewer must be politely insistent in helping him to remember what labor he used during the different months of the year.

Table No. 11

Title: Days worked per year: Cultivation activities and Pastures

This table will give information on the methods used to cultivate the principal crops. It must be completed in direct relation with Table No. 5, which described mixed and single cropping. In Table 11, each group of mixed crops and each single crop shown in Table 5 will occupy one line. In this way, information on number of days worked on the various operations will include the work devoted to all the crops in each mixed group. With this description, it should be easy to fill in the boxes. Each line will contain both a mixed group and a single crop, depending on the description given in Table 5. If a mixed group is involved, the column relative to "Crop Codes" will not be filled in, only the column headed "Number of Group". If the interviewer finds a single crop, he will do the opposite.

It should be noted that for mixed cropping several activities such as soil preparation, cultivation and irrigation are carried out jointly for all the crops. Other activities such as planting, fertilization, harvesting and transportation are carried out separately for the different crops. In this case the interviewer will have to ask how many days were spent on each activity for each crop and add them up, before placing the appropriate total in the space indicated.

This table must be used for all the farm's principal crops, including 90% of the pastures, in terms of area.

Table No. 12

Title: Inputs - 1973

This table gives information on inputs used and/or purchased during 1973. The name appears in the description column and the code number in the second column, as it appears in Code L on the adjacent page. Note that products such as insecticides and fungicides can be specified both in kilos and in liters.

The column "Quantity Supplied by the Establishment" refers to inputs produced by the establishment itself, such as seeds or cassava for planting, or inputs for on-the-spot processing such as sugar-cane for aguardente and/or candy, cow's and/or goat's milk for cheese and/or butter, cassava for flour, etc. If the interviewee is a sharecropper, all inputs supplied by the establishment will be noted, whether produced in the establishment itself or purchased (the sharecropper could not be expected to know the price, and in any case he will not have purchased them).

The next three columns relate to inputs purchased during 1973; quantity (see Code L to obtain the unit to be used for each input), unit price, and distance between the place of purchase and the place of use. Such purchases include inputs used in production and inputs purchased for processing purposes. Note that in the case of payment in goods, i.e. exchange of products, the price of the goods received must be estimated. An example will serve to clarify this point. Let us say that the establishment receives cassava and pays in maize. Then the purchased product is cassava, and its unit price must be estimated and given=in the corresponding column. The price and quantity of the corn exchanged must have already been estimated and given in Table 6. The same applies in the case of sugar-cane given in exchange for candy and cassava given in exchange for flour. Whenever such an exchange occurs, a note to this effect must be made at the side of the questionnaire.

The columns headed "Total Stock at the Start of 1973" refer to inputs existing in the establishment at January 1, 1973. The last column is self-explanatory.

Table No. 13

Title: Sources and use of agricultural credit

This table serves to collect information on all loans outstanding at the start of 1973 and granted at any time during 1973.

The description given in the table seems to be self-explanatory. Only one point requires detailed discussion. Many times what is regarded as a single loan (having been granted all at once) is in reality several loans, since one portion will cover the purchase of machinery, another portion will cover equipment, and possibly another portion will cover building. Generally the sums lent for these activities have different maturity dates and different interest and commission rates. In this case, the interviewer must be careful to use one line in Table 13 for each portion of the loan, so that all the different maturities and interest rates appear in the proper place.

It should be noted that the payment period must also include the grace period, where appropriate.

Table No. 14

Title: Register of sharecroppers in the establishment in 1973

The purpose of this table is to obtain a complete list of sharecroppers, of whom a sampling will be taken for interview. There is no other way to obtain information on the individual sharecroppers, and completion of this table is therefore extremely important.

In order to obviate and/or remove misunderstandings with the owner, the interviewer must make it very clear that the aim of interviewing a few sharecroppers is to obtain detailed information on the technology they use for the different crops, in terms of man/days worked on each operation. Obviously, the owner will only have a rough idea of these figures.

QUESTIONNAIRE - PART II

As already mentioned under item 1 of "Other General Instructions", part II of the questionnaire requires replies only from a sub-sampling of the main sample.

The interviewer will receive instructions on when to take Part II to an agricultural establishment. When the Part II questions are to be asked on an establishment where Part I has already been completed tables 0, 2A, 5, 7, 9 and 12 of Part I will be copied onto the corresponding Tables in Part II in the office before the interview. When the same establishment is not involved, i.e. when the Part I questions have not been asked on the establishment in question, the questions on Tables 0, 2A, 5, 7, 9 and 12 will be asked there. Instructions regarding completion of these tables are given for the same tables in Part I at the beginning of this Manual.

Instructions are given below for completing the other Part II tables.

Table No. 15

Title: Use of labor and equipment for each activity in the establishment. Crops and pastures.

The purpose of this table is to submit information on the use of labor in terms of man/days spent per month on crop-producing activities. This table also indicates the type of equipment and/or implements used on each individual productive activity and the number of days spent in using each of the equipment items mentioned.

Labor is classified by type, as, for example, permanent male labor. This classification was explained in the instructions relative to Table 9. Use Code C - Equipment and Implements - to determine the code number for each type of equipment or implement used for each crop and activity. The activities are subdivided in the code for sub-activities.

This table must be completed only for all the crops which together account for 90% of the value of the establishment's production at market prices. (Crops forming part of this group will be regarded as principal crops).

To fill in boxes 1-18, see Table No. 5. Read the instructions for that table and fill in boxes 1-18 exactly as the data appear in Table 5.

Columns 19, 20 and 21 must be completed by writing in the code number corresponding to the three principal sub-activities for each type of worker used. For example, with reference to Soil Preparation, if permanent male labor has been used mainly for this activity, and for such sub-activities as clearing, stumping and plowing, and permanent female labor has been used only in the sub-activity of burning, then code numbers 1, 2 and 4 must be placed on the line for "Permanent Male Labor" in columns 19, 20 and 21 respectively, and code number 3 must be placed in column 19 (columns 20 and 21 for the item on this line will remain blank). Follow this procedure in completing columns 19, 20 and 21 for each activity.

Use Code C - "Equipment and Implements" to complete columns 22 and 23. The corresponding lines for completion of these two columns are sufficient for listing only the three principal items of equipment or implements used in each activity. The way to complete columns 24-71 for each activity is to show the interviewee the sub-activities and to ask him to indicate the total number of man/days spent each month by each type of worker in performing each sub-activity. Add up these totals and you will get the number of man/days spent each month in completing an activity. Write down this number in the box corresponding to type of worker. Follow this same procedure for each type of worker in all activities relating to a given crop and pasture. After giving the information requested above for the first crop, repeat the process for the second, third and remaining crops and pastures, using separate pages of Table No. 15 until all the principal crops and pastures are shown. Note that each mixed cropping operation occupies only one page: do not use one page for each crop in the group.

Table No. 16

Title: Animal management in the establishment in 1973

The purpose of this table is to give information concerning cattle management in the establishment during 1973. Here the livestock is subdivided into the following classes: (1) draft animals and bovines (cattle), (2) cows in milk and (3) other animals. Classes (1) and (2) are covered by Part A of the table, and class (3) by Part B.

Part A is subdivided into types of pasture used (planted and native) and types of feed (concentrated ration, harvested forage and silage). For each type of pasture and class of animals the use of this pasture must be specified, giving the number of animals and hectares used each month.

In the sertao, the use of common grazing is frequent. In such case, note this type of extensive operation in the margin, and if possible try to determine the area that is common to several stockraisers and/or find out whether there are any restrictions on the number of animals that each stock-raiser may put out to graze.

In the same way, the use of animal feed must be specified: state the number of animals receiving each type of ration and the average number of kilos per animal per day (kg/animal/day) during each month of the year.

With reference to Part B of this table, which includes other animals (hogs, goats, sheep and poultry), the information required and the method of presenting it are self-explanatory. Note that hogs cover boars, sows, castrated boars and suckingpigs, and poultry covers cockerels, hens and turkeys.

Table No. 17

Title: Use of labor for activities in the establishment. Processed products

The purpose of this table is to submit information on the use of labor, measured in terms of man/days spent per month on the production of processed goods in the establishment.

Labor is classified by type, as for example permanent male labor.

Code J gives a list of possible products of the agricultural establishment, which are the result of activities carried out, e.g. milk, in Code No. 210, is the result of milking activities; blood, in Code 213, is the result of slaughtering activities.

In the column headed "Description of Processing Activities", write down the articles listed in Code J which are produced in the establishment. In columns 1-3,give the code number for these products. In columns 4-11, indicate the quantity of each item produced in 1973. In columns 12-59, show the number of man/days spent per month in the production of each item in the establishment.

Table No. 18

Title: Use of labor by activity: Improvements (construction and maintenance)

The purpose of this table is to submit information on labor use, measured in terms of man/days spent per month on construction and/or maintenance of the establishment's fixed assets. Repairs and maintenance of improvements made in 1973 and listed individually in Table No. 3 must also be listed in Table No. 18.

Labor is classified by type, as for example, permanent male labor. Code AA gives a list of fixed assets likely to be found on an agricultural establishment.

In the column entitled "Description of activities relating to the construction or maintenance of improvements" list the establishments fixed assets, one item on each line. Use columns 1 and 2 to indicate the appropriate code number corresponding to each fixed asset. In columns 3-5 specify the quantity of each type of fixed asset located in the agricultural establishment. Use columns 6-53 to indicate the number of man/days spent per month either in construction or in maintenance of the fixed assets of each type described.

Table No. 19

Title: Inputs used in agricultural production during the 1973 crop year

The purpose of this table is to submit information concerning the material inputs used in the production of crops, pasture and livestock. It must be completed for the crops and pastures listed in Table No.15. Remember to use one sheet of Table 19 for each crop planted as a single crop and for each individual group of crops planted as a mixed operation. This table must also contain animals by class or type. See Code L for the list of inputs. These must be specified in the space provided, and the code corresponding to each input must go into columns 16-18. The rest of the information required for completion of this table is self-explanatory.

Table No. 20

Title: Land - Productivity

The purpose of this table is to describe the land in the agricultural establishment in terms of productivity. Ask the interviewee to classify his land into three categories: (1) most productive (2) average productivity (3) least productive. Record his reply to these three classes either in hectares, using columns 1-6-9-14 and 17-22 , or in percentages of total area of the establishment, using columns 7-8, 15-16 and 23-24. Indicate also for each principal crop and pasture listed in Table 15 the area cultivated and production obtained in 1973 by class of land, i.e. what part of each crop was produced on land of greatest, average or least productivity.

Table No. 21

Title: Storage, marketing of products, and markets at producer level

This table on marketing and storage must be interpreted as follows: In the case of an owner, he may sell a given product to a middleman, to the cooperative, to the processing plant and/or directly to the final consumer. In these cases, if the interviewee is an owner, the first 5 columns of the table corresponding to "Owner" will naturally be ignored. If the interviewee is a sharecropper, these columns may be used, since it is common practice for the sharecroppers to sell their share of the products to the owner.

It may happen that part of the crops have already been harvested and sold. Then the quantity sold and the price received will refer to 1973, a fact that must be noted down by the interviewer.

Storage may be entered under "Owner" or under "Leased". An estimate must be made of the value of products not yet marketed.

Table No. 22

Title: Natural Resources - General Information

The purpose of this table is to obtain information on climate and soil and the sources and uses of the establishment's water supply. The questions are self-explanatory.

OP-RESEARCH

Mr. A. Karaosmanoglu

January 18, 1974

Martin Schrenk M.S.

Industrial Capacity Utilization Seminar

1. On January 14 I attended the first day of a week-long seminar, held on two ongoing Bank-financed research projects on industrial capacity utilization. The first project (RPO-295) was initiated and is supervised by Development Economics Department (Mr. F. Thoumi) and covers Malaysia, the Philippines, Israel and Colombia. The second project (RPO-225) was initiated by Messrs. Rosenstein-Rodan and Schydlowsky, is administered by Industrial Project Department and focuses on Peru, Colombia, Brazil, Chile and Venezuela.

2. Both projects have the same focus - reasons for low capacity-utilization, ex-post and ex-ante - and possible remedies; both use fancy econometric models for which the data are collected through sample surveys of enterprises done by local collaborators; and both are still in the model-building/data collection stage. The seminar was apparently the first attempt to exchange views (although advertised and organized by the RPO 295 team, which was fully represented, while only Schydowsky represented the RP 225 project). No strong commitment for cooperation emerged during the day from either side, and I have the suspicion that there is a history of rivalry which has not been reconciled.

3. Five theoretical working papers were distributed, presented and discussed:

(1) Gordon Winston: Capital Utilization: A Neo-classical Model of Optional Shift Work (May 1971)

(2) Gordon Winston and Thomas McCoy: Investment and the Optional Idleness of Capital (June 1972)

(3) Gordon Winston and Ghazi M. Farnac: Employment, Shift-working and Economic Development: A Study of Industrial Workers in Pakistan. (June 1973)

(4) Roger Betancourt and Christopher Clayne: An Economic Analysis of Capital Utilization (1973)

(5) P. Millan and D.M. Schydlowsky: Macro-economic Consequences of Multiple Shifting: An Input-Output Approach (January 1974)

The fact that the first four papers, dealing with micro-economic issues, are part of the RPO-295 exercise, and that the fifth is part of RPO-225 project, does not point to any specialization along these lines. In fact, both projects have a micro - and a macro - economic part each.

MS/gs

4. Without trying to summarize the papers and the discussion, I list below a few points which struck me as being focal:

(a) Emphasis is given to ex-ante (i.e. planned) under-utilization rather than ex-post underutilization.

(b) "Technical" capacity utilization (8760 hours per year minus technically determined maintenance period) is no useful point of reference. Compared to "technical" capacity utilization, actual capacity utilization in the U.S. is estimated around 25 percent and for LDCs generally much lower.

(c) "Optimal" capacity utilization is a crucial concept. Its level depends, inter alia, from the technical capital-intensity and characteristics of the process, relative factor prices, cyclical fluctuations of input and output quantities and prices (particularly shift wage differentials and partial labor and management bottleneck pertaining to shift operation), elasticity of factor service substitution. "Optimal" capacity far below "technical capacity usually constitutes perfectly rational decisions of entrepreneurs, ex-post and ex-ante.

(d) Macro-economic concepts like capital output ratio, capital/labor ratio, productivity of capital and their application to growth, employment, resource allocation are of questionable value in view of the micro-economic theory of optimal capacity-utilization.

(e) Measurement of capacity utilization is extremely problematic. No consensus exists if percentage of shift workers to total workers, average number of shifts, share of actual (either total or "bottleneck stage") in technically possible working hours of equipment (weighed or unweighed), or what else should be used.

(f) No clear terminology exists. "Capacity-utilization" and "capital utilization", "use of capital-stock" and "capital-services" are largely used interchangeably.

(g) No view exists yet on the eventual policy conclusions which might follow the analysis, except that "shádow-prices" would help.

cc. Messrs. Votaw, Horsley, Dubdy, Maiss.

~~cc. Messrs. Votaw, Horsley, Dubgy, Maiss.~~

OP-RESEARCH

Mr. Munir P. Benjenk January 16, 1974

V.D for G.V.

Gregory B. Votaw

Poverty Oriented Programs

With reference to your memo on Poverty Oriented Programs dated October 31, 1973, I send herewith an annotated list of research institutions for the countries in my Department and for Iraq and Jordan. As you will notice our information on the research institutions varies much from country to country, and we will have to keep working on this to develop a more useful list over the next six-twelve months. In the case of Ireland, Jordan, Kuwait and PDRY only a list of research institutions is available.

Afghanistan

The Ministry of Planning and University of Kabul may have a limited capacity to carry out research on income distribution and related fields.

Egypt

Institute of National Planning (INP). This is a semi-autonomous agency which carries out mainly policy-oriented economic research in a wide variety of areas, including urban and rural employment, land tenure, etc. It might well be interested in making some further research specifically on income distribution issues. There appear to be a number of underemployed economists with Ph.D. degrees in the Institute. Overall, our feeling is that the quality of their work should be satisfactory. In fact, we have arranged for the Government to use them to do: (i) a survey of demand and marketing arrangements for fertilizers in Egypt and (ii) a demand survey for cement in the country, both in connection with our immediate two lending operations.

Social and Economic Research Center (American University of Cairo; Dr. Laila Hamamsy, Director). This Center is also involved in research activities relating to social and economic subjects of some variety. Our Population Projects Department have had some discussions with this Center and as we understand, were favorably impressed.

Price Commission. This is a Commission operating withing the Ministry of Planning; it is, strictly speaking, not a research institution, although it works closely with the INP, and its work is highly relevant to the study of income distribution in Egypt.

Iraq

The Ministry of Planning and University of Baghdad are relevant institutions. The Director of the Economic and Administration Research Center of the University of Baghdad recently advised us that the Center has adopted "a new approach to encourage and sustain research efforts that are relevant to problems of development in Iraq". Cooperation with this Institute in research on poverty and related fields may be explored.

Saudi Arabia

The only relevant institutions which investigate economic matters, are Central Planning Organization in Riyadh and Saudi Arabian Monetary Agency in Jeddah. Besides that, universities may also be involved in research in related fields (Riyadh and King Abdelaziz universities); but we have no feel for the quality of their work.

Iran

The following institutions carry out (or could carry out) some research into problems of poverty and related matters:

Independent State Institutes

Tehran University Institute of Economic Research. This is affiliated to the Faculty of Economics and produces (intermittently) a "quarterly" Journal of Economic Research. In the mid-1960's considerable emphasis was placed on agricultural and rural surveys of different regions. The most recent volumes have, however, tended to concentrate on the oil and gas industry. The staff of the institute is, for the most part, the same as the Faculty staff and, in addition, there is a small number of post-graduate students. According to the Dean of the Faculty, Dr. G. Kia, the Institute had been dormant for two years but attempts are now being made to draw up a program of research.

Tehran University Institute of Social Studies and Cooperatives. This institute is also affiliated to its Faculty and research has been carried out into problems of demography, village living standards, farm corporations, etc. The main publications derive from the demography department (under Dr. M. Amani) which grew up under the aegis of the U.N. Technical Assistance Program. The Dean of the Faculty (Dr. Afshar Naderi) says, however, that research into sociological problems of Iranian villages and tribal areas are being carried out and that further research into these fields is expected.

Members of the faculties of political science and geography at Tehran University, as well as of social science departments in the other state universities (Tabriz, Esfahan, Mashhad, Ahwaz) also carry out some small research programs which are likely to be developed as these universities increase in size, status and ability.

Government-affiliated Institutes

Central Bank of Iran Economic Research Bureau. Over the past 12 years this bureau has carried out a number of surveys, the most important of which have been the annual urban household budget surveys from 1964. Price indices and construction data have also been compiled on a regular basis and wage surveys have been started. The Central Bank utilizes its offices in the provinces as well as the many branches of the commercial state bank, Bank Melli, for regional data.

Statistical Center of Iran. This center is affiliated to the Plan and Budget Organization and carries out annual household budget, agricultural, demographic and employment sample surveys. In the past year it has also started producing some analytical reports based on its data-gathering work. Other departments in the Plan and Budget Organization carry out or finance research in their respective fields.

Economic research bureaus exist in many of the other ministries (Labor and Social Welfare, Agriculture, Cooperatives, Education, Health, etc.) and attempts are being made to coordinate and develop the research and data-collecting activities of these agencies.

Private Institutes

The two major private universities in the country - the National University in Tehran and the Pahlavi University in Shiraz have so far made little progress in social science research work as opposed to research into literature and the arts. The various social science departments, particularly those staff members who are on a full-time basis, are showing a greater interest in research, and post-graduate student members are increasing rapidly.

During the past year a number of private economic research and consultancy firms have been established in Tehran. The most promising of these is "First National Economic Consultants" whose partners are the former directors of the economic research bureaus of the Plan and Budget Organization and the Central Bank. The aim of this organization is to provide a link between official government studies and the private sector.

Foreign Institutes

A number of foreign foundations and research institutes have branches or affiliates in Iran. The Fulbright Commission, the British Institute of Persian Studies, the American Institute of Iranian Studies and the Goethe Institute can be included in this category.

Romania

We have not at this stage developed a knowledge of research institutions in Romania. The foremost center of economic research, from which information on other research institutes could be obtained is the National Academy of Economic Science. The Rector of the Academy is Gheorghe Dolgu.

Yugoslavia

Serbian Institute for Economic Research

This is one of several institutes located in Belgrade, under the address Marsala Tita 12. To our understanding, it is a research center for applied research (under contract with government and industry sponsors), consisting of a small but qualified full-time professional staff and a number of "associates", mostly prominent members of the Belgrade University faculty, on a part-time basis. Noteworthy, in the permanent staff is Professor Macura (demographer, economist, head of the institute, fluent in English), and on the academic side Professors Tripo Mulina, and Kosta Mihajlovic (both regional development economics; both read and understand English well but talk through interpreter).

Institute for Economic Research (Institut Za Ekonomska Raziskovanja), Ljubijana.

The institute has some link to Lj. University, the address is Gorupova 7. It is headed by Dr. Vladimir Frankovic who graduated from Cornell University where he worked with Jaroslav Vanek (on the theory of labor-managed economy) and is fluent in English. The Institute apparently still has a line to Cornell (recently two bright Slovenian Ph. D. candidates studying at Cornell with a scholarship from the Institute visited the Bank). The Institute does economic and econometric studies on structural and policy related issues (under contract, mostly from the government or the party), inter alia on matters of inter-regional development. Dr. Frankovic, an excellent economist and econometrician, is a devoted Marxist but working with "Western" analytical tools and techniques. The institute reportedly has, or has access to, a computer center and qualified staff for model building and programming, and it seems to be interested to work with the Bank.

Institute for Agricultural Economics, Belgrade.

The Institute (director Dr. Sveta Popovic) is the Yugoslav counterpart in the Bank research project on "Small-Holder Development Strategies; a Case Study of Serbia." The project is designed and supervised by Mr. Graham Donaldson, Rural Development Division (CPS).

Institute for Hygiene and Social Medicine, Sarajevo University.

The Institute is headed by Professor Grujica Zarkovic. Professor Zarkovic who speaks English well and worked for some length with an American university as a research fellow, is the head of the Yugoslav Family Planning Association and developed in this capacity wide international contacts. He works with a group of "assistants" on demographic and family planning issues. The emphasis is less on the "technical" aspects of family planning than on the interrelation of demographic with economic development, apparently with the intent to "spread the gospel" in Yugoslavia. Professor Zarkovic did, on request of the Kosovo government, some preparatory work on a family planning project in Kosovo (the "poverty pocket" of Yugoslavia with a natural rate of population increase of around 3 percent per year), which might some day be submitted to the Bank. Professor Zarkovic recently finished - jointly with a team of economists of Sarajevo University - a long-term demographic-economic model exercise. Applying a simulation model developed by TEMPO (General Electric) he estimated the evolution of the interregional and intersectoral income discrepancies in Yugoslavia on the basis of certain demographic and economic assumptions.

The Institute for the Study of the Standards of Living:

Contact: B. Sefer (Chief)

Address: Dom Sindicata
Boulevara Revolutii
Belgrade

The Institute conducts work on income distribution, consumption levels, inter-original purchasing power parities, costs of living indexes and other related topics. Its work is of a high quality, it publishes frequently (possibly even regularly) material which is well read by policy authorities, the press, trade unions and others. Professor Sefer, who has already had contact with the Bank, speaks fluent English.

The Institute of Geography, University of Zagreb:

Contact: I. Baucic

Address: Zagreb, Marulicev 19/11

This Institute's work impinges on the question of poverty alleviation in that it has conducted a considerable amount of research on external migration, including research on micro-regions from which migrants have come. There are several publications in this field. Dr. Ivo Baucic speaks reasonable English and good German.

The Economic Faculty of Zagreb University and the Ekonomski Institut

Both have, reportedly, a high-caliber staff; the Institut has, in addition to some permanent staff, "associates" from the university faculty. The director of the Institut is Professor Lang, the Institute is oriented towards quantitative research and is linked to the periodical "Ekonomski Pregled" (one of the best professional periodicals in Yugoslavia). We have no knowledge of any research work directly related to poverty in either institution, but the size, diversity and caliber of their staff make it likely that some work in this area is going on or could be launched.

Spain

The Junta de Energía Nuclear (JEN), depending on the Ministry of industry, is the largest and probably best equipped research center in Spain. In 1972, JEN's budget was in the order of Ptas. 1,400 million (about $22 million). Its full-time staff exceeds 2,300 of which about 1,400 are employed in Madrid. The activities of JEN center on research on and engineering of nuclear reactors, the production and sale of radioisotopes, and the application of radioisotopes in medicine, industry and agriculture (irradiation of potatoes and other food). JEN has to-date constructed three experimental fast breeders, one of which was 100 percent made in Spain. JEN also disposes of all technologies for the production of uranium, except for uranium enrichment. JEN has been extending its activities to water desalination, pollution control, electronics, metallurgy and ceramics.

The Patronato "Juan de la Cierva", is an autonomous organization depending on the Ministry of Education and Science. It controls 22 institutes concerned with research activities in a wide range of matters, including food technology, fats and oils, construction materials, metallurgy, organic chemistry and pharmacology. Sixteen of the institutes are in the Madrid area. The group had an annual budget of Ptas. 975 million ($15 million) in 1972, and it employed staff of over 1,600. Most of the research laboratories of the Patronato are well equipped and technically up-to-date. Some of them even gained some international reputation, such as the Instituto Eduardo Torroja de la Construcción y del Cemento and the Valencia-based Instituto de Agroquímica y Tecnología de Alimentos. However, the efficiency of the Patronato laboratories suffers to a considerable degree from inflexible and interfering administrative regulations. There is little financial autonomy, and contract research is a little developed source of income.

The Instituto Nacional de Técnica Aeroespacial (INTA), is a research institute dependent on the Air Ministry (Ministerio del Aire). Its 1972 budget amounted to Ptas. 449 million (about $7 million). In 1972, INTA employed a research staff of about 1,000 people. Primarily engaged in research related to flight and space techniques, its activities include also work in the fields of metallurgy and pollution control. INTA offers its test and EDP equipment also to industrial users.

Instituto Nacional de Investigaciones Agronómicas (INIA), autonomous entity of the Ministry of Agriculture. Description in Bank Report PA-74a entitled "Agricultural Research Project, Spain", dated April 29, 1971.

Industrial Research Association, supervised by the Comisión Asesora de Investigación Cientifica y Técnica (CAICYT) of the Presidency. There are 17 such associations. Their importance is relatively small but they fulfill a useful function in those sectors, in which production is broken up into small units and entrepreneurs are usually in no position to carry out test and research activities on their own. The Office of Science and Technology has the 1972 Annual Report for these research associations.

Ireland

Agricultural Institute, Dublin
- Statistics and biometrics Department, Dublin
- Soils Division, Wexford
- Plant Sciences and Crop Husbandry Division, Oakpark, Carlow
- Animal Production Division, Dunsinea, Castleknock, Co. Dublin
- Horticulture and Forestry Division, Kinsealy, Malahide, Co. Dublin
- Rural Economy Division, Dublin

Building Centre of Ireland, Dublin (Research subject: Building and industrial products).
College of Pharmacy, Dublin (affiliated to Trinity College, Dublin)
Dublin Institute for Advanced Studies (DIAS), Dublin
- School of Theoretical Physics
- School of Cosmic Physics

Institute for Industrial Research and Standards, Dublin
Medical Research Council of Ireland, Dublin
National Institute for Physical Planning and Construction Research, Dublin
Royal Academy of Medicine in Ireland, Dublin

Universities:

Dublin University, Dublin
- School of Natural Science
- School of Medicine
- School of Veterinary Medicine

National University of Ireland, Dublin

University College, Dublin
- Faculty of Science
- Faculty of Medicine
- Faculty of Engineering and Architecture
- Faculty of General Agriculture
- Faculty of Veterinary Medicine

University College, Cork
- Faculty of Science
- Faculty of Dairy Science
- Faculty of Engineering
- Faculty of Medicine

University College, Galway
- Faculty of Science
- Faculty of Medicine
- Faculty of Engineering

Jordan

University of Jordan, Amman (founded 1962)
- Faculty of Arts
- Faculty of Economics and Commerce
- Faculty of Sciences

Department of Scientific Research (Agriculture), Amman
founded 1958, part of Agricultural Institute, Tulkarn
(now on Israeli-occupied West Bank)

Kuwait

Kuwait University, Kuwait City (founded 1962)
- Faculty of Science
- Faculty of Arts
- Faculty of Education

PDRY

Institute for Animal Production and Veterinary Research, Lahej
(founded 1972 with Russian and East German assistance)

El Kod Agricultural Demonstration and Training Institute, El Kod
(founded 1970 with UNDP assistance)

Fisheries Training and Research Center, Aden and Mukalla (set up in 1969)

V.D. for [illegible],

cc: Messrs. Davar, de Lusignan, Horsley, Upper, Maiss, Dubey and Kohli

VDubey:ej

OP RESEARCH

January 16, 1974

Mr. Ngiam Tong Dow
Permanent Secretary
Ministry of Finance
Singapore 6

Dear Mr. Ngiam:

During previous missions, some of our staff have talked with you and others about a study of traffic restraint in Singapore. I understand it was generally agreed that such a study was necessary and that it should be carried out under the management of the Ministry of Finance with some technical assistance from us and with some short-term consultation with one or two outside technical experts. It was also the general view, last time it was discussed, that the principal purposes of the study should be to examine the administrative and practical problems of alternative methods of restraining traffic and to get some preliminary idea of the costs and revenues associated with different methods. A few runs with the existing computer models were envisaged as sufficient to indicate where and at what level congestion pricing should be employed and the potential benefits of doing so.

Since those last discussions in Singapore, we have done some careful thinking about how a study could be designed to achieve the purposes stated above. Several considerations have combined to lead us to a new point of view, namely, that the scope of the study should be appreciably expanded if it is to provide the basis for a choice among alternative methods of restraint. In particular, we now think there should be a thorough examination of empirical research that has been done on how trip-makers' decisions are affected by cost changes, that the formulation of the computer models should be somewhat modified to incorporate price-responsiveness in some decision functions where it is not now provided for, and that a rather extensive series of computer runs should be made as part of the comparison of different combinations of restraint methods. These aspects of the study would be in addition to examination of administrative and physical problems related to implementation of various methods.

I will briefly explain our current thinking in this letter, and hope that we can discuss it more thoroughly during our upcoming meeting, after more immediate questions have been dealt with. We were first troubled by the question of what sort of guidance the previously contemplated study would yield for choosing methods of traffic restraint. For example, if analysis indicates that one method would cost more than another to implement, what could be said about their relative effectiveness in relieving congestion at given levels of charges, about their economic benefits, or about the revenues that either would generate? Without some knowledge of those matters, it would not be possible to select a method to be developed and used. We can see no way to address these questions without simulating the traffic flows and public transit trips for restraint systems employing the alternative methods. For any given method, indeed, a number of variations in the geographical pattern and restraint levels might be required to arrive at a reasonably good design.

Having recognized a need for making comparisons by means of the computer models, we then became aware that the existing models, excellent though they were for their original purpose, would require some modifications to make them realistically respond to policies involving different geographical patterns of prices. Moreover, this would not be simply a matter of reworking the appropriate parts of the computer programs to correspond to well-known price effects. The effects of prices on trip-makers' decisions are still not well established, and the first step would have to be a review of recent and current research on the subject to ascertain what should be put into the models to achieve meaningful results.

Thus we have been led to a rather different conception of the minimum research program that would provide a useful basis for selection of restraint methods. While this expanded scope seems to us necessary simply to achieve the original limited objectives, it will also, as a byproduct, fulfill some worthwhile objectives that were not parts of the original set. It will, for example, constitute the first approximation toward the design of a system of zones, if that should be a part of the approach chosen, or of a pattern of charges for whatever variable-price system might be used. It will reveal differences in the geographical patterns of vehicle flows induced by different methods of restraint. It will also yield preliminary estimates of revenues and economic benefits for different systems.

During our forthcoming discussions in Singapore, matters related to the completion of Phase I and the preparations for Phase II of the Mass Transit Study will presumably be of primary concern. Nevertheless, I feel that it is also important to exchange ideas on the traffic restraint study and to reach some agreement on its outlines and on actions to be taken toward getting it under way. Mr. Edward Holland, who will be a member of the mission, has been assigned responsibility for assisting your team in working out the research strategy and for coordinating other aspects of the Bank's cooperation in the traffic restraint study. I am asking him to confer with you and with others whom you and he deem appropriate, in order to arrive at a more specific plan of action, which I hope can be agreed on and initiated before long.

Sincerely yours,

Edward V.K. Jaycox
Director
Transportation and Urban
Projects Department

EPH

EHolland:db

OP-RESEARCH

Ms. Nancy C. Hwang, ECDRB January 11, 1974

Douglas H. Keare, Chief, ECDRB DHK

Urban Land Research Mission: Terms of Reference

1. On January 18 you will proceed to Seoul, Korea, where you will investigate urban land policies in Seoul and Kwangju beginning on Monday, January 21. You will work under the general supervision of Mr. Orville Grimes. Field work in Korea is scheduled to last approximately three weeks.

2. On February 5 you will proceed to Taipei for approximately three days of discussions with government officials on urban land policies and planning.

3. From February 11 to 15, you and Mr. Grimes will hold discussions in Paris and Stockholm on measures which form the basis for French and Swedish urban land use planning.

4. You will return to Washington on February 16. Upon your return you will work on a report of the findings of this mission and prepare for additional field work in Colombia in April, 1974.

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

D.P. Research

TO: Files

DATE: Received and typed January 10, 1974

FROM: Ravi Gulhati, ECDDR

SUBJECT: Tokyo Visit

1. I had a long talk with Prof. Shigeru Ishikawa about current research interests of the Institute of Economic Research at Hitotsubashi University. Two research themes are of special interest to the Bank. The first is on the Chinese Model of Economic Development and involves the analysis of the following five subject areas:

(i) The system of Non-Material Incentives as a partial substitute for the market mechanism and the system of planned directives.

(ii) The Principle of Self Reliance applied at regional and county levels in preference to the allocative criterion of Comparative Advantage applied on economy-wide basis.

(iii) The Policy Regarding Technology and Technical Choice

(iv) Policy Regarding Employment

(v) Agricultural Organization

2. Prof. Ishikawa handed me reprints of a number of articles he had published in various journals on the China theme. A quick reading of these suggests that his approach is systematic and scholarly; a useful antidote to the romanticism characteristic of so many writers on China today. After his tenure as Director expires in October 1974, Prof. Ishikawa is planning a month long visit to China in pursuit of his studies.

3. We can learn a lot from Ishikawa's China project. I asked him to keep in touch and let me know when he can spend some time with us in the Bank.

4. The second research theme of the Institute of interest to the Bank is the Comparative Study of Japan: Economic History and Asian Economic Development. Regrettably, time did not permit me to explore the content of this work at any length.

5. Prof. Ishikawa promised to send me a written account of the institute's research projects.

6. I promised to give him the citation to S.Epstein's article in which she talks about the "rural transient worker" in India. (Timothy could you drop Ishikawa a note about this citation.)

***

7. Miss Orellano should write to Mrs. E. Peterson, Secretary Anglo-Chinese Educational Institute, 24 Warren Street, London W1 P5 D G requesting her to send me a copy of their Modern China Series No. 4 by Mrs. Joan Robinson entitled, "Economic Management China 1972".

8. The visit to the International Development Center of Japan was something of a disappointment. Prof. Okita was away in the Mid-East doling out foreign aid to the oil-sheikhs. His staff explained at length the "research" they were conducting. Most of their studies sounded like Bank project, sectoral or country economic mission reports rather than research as we are beginning to define it.

9. Dr. Horiuchi of the Center has recently completed the field work on the "Comparative and Analytic Study of Industrialization in Asia" covering the ASEAN countries and focusing on (i) export promotion policies and (ii) impact of private foreign investment. I requested him to send us the paper on this subject for Malaysia. This should be available in *** the spring or summer of 1974 (Montek please note).

10. Horiuchi wants to start work on the economics of small industry in calendar 1974 and wanted to know if the Bank wished to collaborate. I told him we were interested in the subject and he should keep in touch as his ideas developed.

11. Kano (Managing Director) mentioned that the Center expects to initiate work on "Japan's Modernization Strategy" in collaboration with Prof. Ohkawa (presently in Yale). The aim will be to make Japan's development experience accessible to LDCs; broadly the same objective as that of Ishikawa's second research theme.

cc: Mrs. Hughes
Division Chiefs, ECD
Mr. Ahluwalia, DRCID

P. Rereandy

January 10, 1974.

Mr. K.K.Chakravorty
AAssistant Registrar General
2A Mansingh Road
New Delhi 11
India

Dear Mr. Chakravorty:

I attach a copy of a cable which I sent to you yesterday. By the time you receive this letter, my colleague, Dr. Dipak Mazumdar, would probably have contacted you to discuss the feasibility of obtaining a one percent sample tape of the 1971 census count in the Bombay metropolitan area, which may be taken to correspond to the region with which CIDCO is concerned.

The study of the Bombay labour market, which will be conducted primarily by my colleagues at Bombay, Dr. Lalit Deshpande and Dr. T.S.Papola, is intended to obtain an in-depth view of the differences in the characteristics of labour and their earnings in the unorganized and the organized sectors. The Government of India have approved the acceptance of the funds offered by the World Bank to undertake this study. Within the next two months we should be able to complete the formalities as well as the preparatory work required to launch the pilot study. For this purpose, it will be essential for us to obtain the classification of workers in different industries and by class of workers. In addition, we would like to examine the migration characteristics of workers engaged in different industries as self-employed workers or employees.

I trust there will be no difficulty in providing the tape for this project. If the non-availability of the magnetic tapes happens to be a constraint, we shall try to overcome it by providing the requisite funds out of the budget earmarked for the project. I trust it will be possible for you to indicate the time you would need to give us a duplicate tape and the likely cost.

It will be better if you would kindly correspond at my residential address (given below) because of the long delays in the Bank's mail room. Should you happen to visit here, we shall certainly be happy to have you stay with us. Our apartment should be well equipped by the end of the month.

Please convey my best regards to Mr. Chari and Mr. Raghvachari.

With kind regards,

Sincerely yours,

Residential address:

(Pravin Visaria)
Population & Human Resources Division
Development Economics Department.

PV:bnd

D.P. Research

January 10, 1974.

Dr. D.T.Lakdawala
Director, Economics Department
Bombay University
University Campus
C.S.T. Road, Kalina
Bombay 29, India

Dear Dr. Lakdawala:

I am sorry for not writing to you for so long after leaving Bombay. We have moved to an apartment on January 1, but it will take two or three more weeks before the apartment is well equipped.

As you know, Dr. Dipak Mazumdar plans to visit Bombay on January 18 and 19. We have had fairly detailed discussions about the timing of our Bombay labour market Study, and also its scope. As a result of these discussions, we have come round to the view that it would be much better to launch a full study instead of one which would be split in two phases. The problem of funds can be tackled when the proposals are due for submission to the Research Committee of the Bank in late April or early May. It is proposed that we should ask for funds for the entire project. If, however, the Research Committee does not grant the required funds, the presently approved amount of $16,000 would of course remain available for a study on the scale we have considered feasible as the first phase.

The idea is certainly not to delay the Study to some time after May. In fact, we should utilise the time available between now and May or June to undertake a small-scale pilot Study which would permit a careful testing of the schedules as well as the sampling procedures we adopt. Obviously, this would require additional funds and, as Dipak will tell you, the Bank could commit an additional amount of the order of $4,000 for this purpose.

As far as I can see, changes of this kind would mean a deviation from the time schedule of the contract sent earlier, but they would certainly help to improve the quality of the entire research project. I trust Lalit and Papola would agree with this view.

I also believe that we should try to obtain a tape of the one percent sample of the 1971 census for Greater Bombay as well as adjoining areas, i.e., for the CIDCO region as a whole. The availability of the tape would enable us to make reasonably detailed analysis of the migration antecedents of the workers engaged

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in different industries in different capacities, i.e., as self-employed, employees or family workers. It would supplement the results of the survey and provide a very rich background material. It is my impression that it should be possible to obtain a tape for the CIDCO region for Rs.3,000 to 5,000. I have already sent a cable and also written a letter to the Assistant Registrar General who deals with these matters. A copy each of my cable and the letter are attached. If you can probably pursue the matter and obtain a quick decision or action, by speaking to Shri R.B.Chari (the new Registrar General and Census Commissioner), it would be very useful. Also, if there is any difficulty in obtaining the tape for areas other than Greater Bombay, we should immediately obtain the tape for Bombay and then try for the tape for the adjoining areas within the CIDCO region.

Leela joins me in sending you and Mrs. Lakdawala our very warm regards. Please convey our regards also to other friends in the department.

With best wishes,

Sincerely yours,

Pravin

Pravin Visaria
Population and Human Resources Division
Development Economics Department

PVisaria:bnd

OP-RESEARCH

Mr. Sushil K. Bhatnagar January 9, 1974

Gladys A. Bonenfant gb

Quarterly Progress Report on Policy and Research Functions - Industrial Projects Department - (Form No. 605)

With reference to your memo of January 4, attached is our progress report on the subject as of December 31, 1973.

cc: Messrs. Fuchs, Kalmanoff, Moore, Cash, Dewey

Form No. 605
(4-73)

CENTRAL PROJECTS STAFF

INDUSTRIAL PROJECTS DEPARTMENT

QUARTERLY PROGRESS REPORT ON POLICY AND RESEARCH TASKS/PROJECTS UNDER EXECUTION, 1/ STATUS AS OF DECEMBER 31, 1973

TASK/PROJECT	STAFF	DATES						REMARKS
		Start		First Draft		Completion		
		Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	
POLICY FORMULATIONS								
Mining Policy Paper	Bosson	11/71	11/71	3/72	3/72	5/31/73	10/1/73	Scheduled for Board review on January 29, 1974.
Effectiveness of Various Types of Bank Group and Other Assistance to Industry	Moore	7/73	7/73	12/73	2/74	3/74	4/74	
Appropriate Share and Timing of Bank Group Assistance to Industry	Moore, Thadani	7/73	7/73	12/73	2/74	3/74	4/74	
International Division of Labour for Selected Industries	Moore, Ragetly	7/73	7/73	12/73	4/74	3/74	6/74*	* Will be delayed. Basic FAO report not forthcoming.
GUIDELINES AND STANDARDS								
How to Deal with Risk	Dewey, Kohli Ferber	1/73	1/73	3/31/73	4/30/73	5/31/73	12/10/73	Paper distributed December 10, 1973.

1/ Include tasks/projects completed within the quarter, under way or expected to start within the next quarter. Tasks expected to start in the next quarter should be reported separately, after those completed or under way.

Form No. 605
(4-73)

CENTRAL PROJECTS STAFF
INDUSTRIAL PROJECTS DEPARTMENT

QUARTERLY PROGRESS REPORT ON POLICY AND RESEARCH TASKS/PROJECTS UNDER EXECUTION, 1/ STATUS AS OF DECEMBER 31, 1973

TASK/PROJECT	STAFF	DATES						REMARKS
		Start		First Draft		Completion		
		Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	Original Plan	Current Plan/ Actual	
RESEARCH								
Pulp and Paper	Ragetly, Tarnawiecki	5/72	5/72	3/31/73	6/15/73	6/30/73	12/31/73	Delayed by diversion of staff to operational work.
The Steel Industry in the Second Half of the 1970's.	Jaffe, Thadani	10/72	11/73	6/30/73	2/28/74	12/31/73	4/30/74	
Public Sector Enterprise-Bank Role in Selected Countries	Moore, Walstedt, Iskander	7/73	7/73	3/1/74	3/1/74	4/1/74	4/1/74	
Comparative Performance of Public and Private Sectors - Fertilizer Plants in India	Moore, Iskander	7/73	7/73	3/1/74	3/1/74	4/1/74	4/1/74	

1/ Include tasks/projects completed within the quarter, under way or expected to start within the next quarter. Tasks expected to start in the next quarter should be reported separately, after those completed or under way.

OP-RESEARCH
(298)

Mr. Orville F. Grimes, Jr., ECDRB January 8, 1974

DHK

Douglas H. Keare, Chief, ECDRB

Urban Land Research Mission: Terms of Reference

1. On or about January 17, 1974 you will proceed to Seoul, Korea, where you will be joined by Nancy Hwang and William Doebele (consultant) to begin work on Monday, January 21, 1974.

2. The purpose of your mission will be to undertake field work on urban land policies ~~in two cities~~ (Seoul and Kwangju) in Korea, as part of Research Project RPO 298 ("Urban Land Policies: Taxation and Control"). You will ~~act as~~ coordinator of the mission, supervising the work of Ms. Hwang and Mr. Doebele. You will have primary responsibility, in collaboration with Ms. Hwang, for investigating (a) the role of urban land taxation in urban development processes; and (b) the effectiveness of betterment levies and land value increment taxes in specific policy contexts, with emphasis on their role in land price inflation, land speculation and public investment in infrastructure, street upgrading and other improvements. From January 22 to 25 you and Ms. Hwang will work closely with Mr. Jeremy Warford, who will investigate the feasibility of alternative sources of municipal revenue, particularly user charges and fees, in ordering urban land uses. As necessary, you will give guidance to William Doebele in mission objectives which are his primary responsibility, i.e., investigating the effectiveness of land use control measures other than taxation (advance acquisition, expropriation, zoning and building code restrictions), with an assessment of the implementation capacity of these measures in the Korean context; and assessing the impact of land use control measures on living conditions of the urban poor. Your main contacts within the Korean government will be with the Economic Planning Board, Ministry of Construction, Ministry of Home Affairs, and with officials of the municipal governments of Seoul and Kwangju. Field work in Korea is scheduled to last approximately three weeks.

3. While in Korea you will decide whether a short trip to Taiwan for discussions of urban land policies and planning is desirable. If so, you will visit Taipei from February 5 to 8. You will, of course, make arrangements for this visit prior to the mission's departure for Korea, and obtain clearance for it from the Asia Regional Office.

4. Immediately following this portion of the field work (on or about February 8), you and Ms. Hwang will proceed to Paris for discussions with French officials on measures which form the basis for French aurban land planning. On February 14, you and Ms. Hwang will proceed to Stockholm where you will join William Doebele for similar discussions.

5. You will return to Washington on or about February 16, 1974. Upon your return you will begin work on a report of the findings of the

mission. This report will be supplemented by additional field work in Colombia in April 1974 (see separate terms of reference) and later integrated into the overall report of the research team.

DHK:ap

Cc. and Cleared with: Ms. Hughes

Cc.: Mr. Messenger
Mr. Sison
Mr. Warford
Ms. Hwang
Mr. Doebele (consultant)

OFFICE MEMORANDUM

File
S.P. Research

TO: Mr. Alexander Stevenson DATE: January 7, 1974

FROM: Stanley Please

SUBJECT: Developmental Strategies for the Environmentally Constrained: The Least Developed Nations

1. I have discussed the above research proposal with the senior economists in the Region and with Hans Adler. We have emerged from this discussion with a somewhat negative reaction to it.

2. Our major concern is the apparent over-ambitiousness of the project and its failure, as we see it, to present a proposal that lives up to the expectations generated in the earlier paragraphs that a major departure from a conventional approach is being presented. The attempt to question the widely accepted strategy for these least developed countries of "more of the same, more thoughtfully consistently and resolutely applied" is not borne out in the research proposal. Many of the issues which will be focused on in the research are somewhat "old hat" -- development planning and administration, human betterment, environmental development, project design, etc. Furthermore in presenting these issues and in the whole presentation of the research proposal we are not convinced that the authors have isolated hypotheses to be tested. The proposal is, I think, in danger of developing into a highly descriptive exercise and, although I hate to say it, I think runs the danger of having too much of a "geographer's" input and too little of an input from social scientists including economists. Related to this is our concern that the first phase is to be a rigorous statistical analysis using cross-section regression analysis and factor analysis. This will require, as stated, "a minima of statistical materials." I would like to feel that we have already fully exploited the socio-economic data which are presented religiously as attachments to our formal country documentation before we start on further statistical collecting exercises.

3. In considering the proposal we have certainly not wished to be seen as opposed to comparative country analysis but it seems to us that possibly a far less ambitious project embracing three or four countries with similar problems might be better than the 50-country analysis proposed in the report (75 countries if one includes regions within the larger developing countries). I assume, however, that the statistical methodology to be employed requires as large a number of countries and regions as possible.

4. One final point which relates to your own observations about our knowledge or lack of knowledge of the techniques of environmental analysis. It would be useful if we were to be given some indications of the way in which this analysis has been used in the past and its usefulness rather than setting out on an exploration into a field in which the Bank appears to have had little or no experience. If this type of methodology really is at the frontiers of research then it raises the question, of course, as to whether the Bank should be involved in it at all or whether we should not wait for the methodology to be developed further in universities and research institutions before getting involved ourselves. Given our shortage of research funds we must presumably be particularly careful in financing innovative and exploratory research.

SPlease/lo

Bellagio LT INTL COUNCIL FOR EDUCATIONAL DEV. CC OR RESEARCH JAN 7

With the compliments of

JAMES A. PERKINS
Chairman

International Council for
Educational Development
680 Fifth Avenue
New York, New York 10019

ıcil for Educational Development

., New York 10019 212/JU 2-3970 Cable INCEDEV

3ER 6, 1973

CONTACT: MARY L. RYAN
(212) 582-3970

New York, N.Y. - December 6 - James A. Perkins, Chairman of the International Council for Educational Development, announced today that Kenneth W. Thompson will join ICED on January 1, 1974, to direct a new program on Higher Education for Development. This program is the result of several years of deliberations by a group of institutions -- national and international, public and private -- which have asked ICED to conduct a study of strategies and projects on which donor agencies might concert their efforts in developing countries. ICED was requested to make the study because it is a private agency, with an international board of distinguished educators, which deals with problems of higher education in both developing and developed countries. ICED's recently completed studies for the World Bank and for UNICEF give it a special competence in this field.

The agencies supporting the study are the Agency for International Development, Canadian International Development Agency, Ford Foundation, French Ministry of Foreign Affairs, Inter-American Development Bank, International Bank for Reconstruction and Development, International Development

Research Center (Canada), Overseas Development Administration (Great Britain), Rockefeller Foundation, United Nations Development Programme, UNESCO and UNICEF.

Mr. Thompson has been the Chairman of a Task Force of representatives of the agencies involved. As Vice-President of The Rockefeller Foundation, primarily concerned with the social sciences and international affairs, he took the leadership in designing the Foundation's program on university modernization in various parts of the world.

In announcing the appointment Mr. Perkins said, "The ICED is both pleased and proud to have been selected to manage this most important enterprise. The availability of Kenneth Thompson assures a necessary continuity and the highest professional level of leadership. I am delighted that Ken Thompson will join me and Philip Coombs, ICED Vice Chairman, as a partner in this and other enterprises."

Dr. John H. Knowles, President of The Rockefeller Foundation, said, "All of us at The Rockefeller Foundation are delighted that Mr. Thompson is assuming this important position with the ICED. We look forward to working closely with ICED and Mr. Thompson in exploring new opportunities in the field of higher education for development."

Mr. Thompson joined the Social Sciences Division of The Rockefeller Foundation in 1955 and has been Vice-President since 1961. He had previously been a member of the political science faculties of Northwestern University and the University of Chicago. Mr. Thompson is the author of numerous books, among them Foreign Assistance: A View from the Private Sector; The Moral Issue in Statecraft; American Diplomacy and Emergent Patterns; Political Realism and the Crisis of World Politics. He is a Fellow of the American Academy of Arts and Sciences; a member of the Council on Foreign Relations; a member of the Boards of Editors of International Organization and Worldview; a member of the Policy Studies Committee of the United Nations Association of the U.S.A.; Chairman of the United States Study Group on Cultural Relations for the Future, an international inquiry sponsored by the Hazen Foundation; and belongs to numerous professional associations.

be sending you periodic reports on the various
d above. Meanwhile, I hope you will feel free
have any questions about this letter.

ighted to be continuing this work, and James
ro and I hope to meet with you individually in
re if we haven't already done so by the time this

Sincerely,

Ken

Kenneth W. Thompson

tine, Director
ment
k for Reconstruction
.W.
20433

Mike & I would like to come
down to see you at an early
date.

yellow
O.P Research

OFFICE MEMORANDUM

TO: Mr. J. J. Warford

DATE: January 7, 1974

FROM: Y. Rovani

SUBJECT: INDIA: Telecommunications Research Project
KOREA: Urban Economics Research Project
Terms of Reference

You should plan to arrive in Delhi on January 15, joining Mr. Vasudevan in meetings with the Indian P&T Department. The object of your visit is to continue the discussions that were initiated during negotiation of the most recent telecommunications loan to India. Agreement was then reached on the need for economic analysis of telecommunications projects, emphasis at the time being given to the need to carry out surveys of telephone usage, with special reference to the impact of telephone service in rural areas.

During your mission you should try to obtain a firm commitment from the P&T to embark upon a research program, and assist in its design. You should attempt to bring together P&T and local university economists, and if necessary be prepared to offer a small grant (say $5,000) from Departmental funds to finance the involvement of university economists and/or students in the project.

You should leave Delhi on January 19th, and proceed to Seoul, where you will join an urban economics research team led by Mr. Grimes. Your role will be to analyze pricing policies for water supply and sewerage in Seoul, and to determine the present and potential impact of those policies on land use. Specifically, you should attempt to determine the optimal pricing strategy for water and sewerage, which <u>inter alia</u> requires estimates of long run marginal costs of supplying various geographic areas, and analysis of the economic status of beneficiaries. Should it be determined that these services may be used as a source of general municipal revenue, you will advise how this can be achieved in a way that minimizes the misallocation of resources, subject to income distributional considerations.

You will leave Seoul on January 25th, reporting back to the office on January 29th.

cc: Mr. Achikzad (South Asia)
Mr. Grimes (Development Economics)

JJWarford:pjk

OP-RESEARCH

Mr. Douglas H. Keare, Development Economics January 7, 1974

Edward V.K. Jaycox, Director, Transportation & Urban Projects Dept.

Re your memo "Work Program, Research Program and Budget for FY75" dated December 27, 1973

1. Regarding the research program review mentioned in para. 2 which is to be sent to the Research Committee in late February, we would be happy to look at a draft of this with the purpose of promoting a full coordination of viewpoints.

2. In para. 3 reference is made to possible contributions by URED to urban studies or aspects of them. Such studies, whether undertaken for UNDP or financed out of project loans, have of course to conform to operational requirements and the views of the financing agency or country. The general responsibility of the T&UPD cannot be delegated. We, however

- welcome the possibility of URED assuming some of the management functions;

- fully accept need for URED involvement in such cases from an early stage onwards;

- concur with the desirability of utilization of such studies where appropriate to provide inputs for research programs as an alternative to separate Research Committee financed studies;

- agree that a part of URED effort previously programmed for Urban Surveys should be redirected for this purpose.

3. With reference to the division of urban surveys into those concentrating on national urban systems and others, we would be happy to see the URED input focussing more on the former as you suggest. As such surveys would, as you state, "provide a link between country economic work and project identification", we would necessarily continue to have a considerable interest in them. They can be expected to provide increasingly the rationale for our project program and the choice of country and terms of reference are correspondingly important. We would expect, therefore, to maintain our responsibility for general organization of such surveys in liaison with the regional offices and URED -- acting in this respect as though we were a project division of the region. The same is true of the economic missions referred to in 6(a).

../2.

4. Concerning surveys of specific urban area surveys, we should perhaps maintain a more flexible approach than is indicated either by the past practice or the one you suggest for the future. The size and type of missions should probably vary quite considerably according to the city chosen and stage of local urban policy and project preparation. The division of such work between URED and T&UPD and leadership of missions would accordingly be decided on the basis of actual choice of cities rather than in the abstract. There may, incidentally, be a case for greater concentration rather than expansion in the number of cities covered.

5. We would accordingly, at this stage, wish to stick to the recent agreement with P&B as set out in the memo to Files of Mr. Paul Smith dated April 19, 1973. We do, however, recognize the need for earlier and closer collaboration on the development of the program of sector and economic missions and we would welcome an extension of delegation of the running of such missions following such agreement on the program and terms of reference.

6. In general, the division of work between the various operational categories appears sensible to us. With the various minor provisos indicated above, we would be happy to support it.

cc: Messrs. Gulhati, Development Economics
Mrs. Hughes, " "
Churchill, Trans. & Urban Projects
Dunkerley, " " "

HDunkerley:mta

/OP-RESEARCH
CC: OP - G.O.P. - JOINT + PARALLEL FINANCING

DPS and CPS Department Directors

January 7, 1974

Signed Hollis B. Chenery

Hollis B. Chenery, VP, Development Policy

Financing of Research Projects

1. As you know, we have encouraged research project monitors to seek participation of other financing agencies wherever our budget resources did not permit the full financing of a research project. In the past this initiative was left with the individual researchers, and the number of projects involved was relatively small. With the growth of the research program, the number of contacts with other financing agencies has increased and it has become necessary to systematize the procedures by which we seek parallel or joint financing.

2. Given the limited external research budget, it is desirable that we seek to participate with others in order to be able to finance a minimum effective scale of research on a given subject. Our priorities as to subject matter and our approach to methodology may not always match that of other institutions financing social science research. To develop a joint financing package can therefore take a considerable amount of time, and the management of the research itself is likely to be complicated. Nonetheless, the expansion of country coverage that is possible with multiple sources of financing, and the interchange of ideas on research methodology, are valuable by-products.

3. While requests to other financing institutions are therefore entirely appropriate, unless such requests are made in a coordinated manner, they may lead to a misallocation of our own resources since the other agencies are in no position to assess our priorities. It is evident that the other financing agencies will be able to devote only limited resources to joint research. We must therefore have in mind which of our projects would be best served by expansion beyond that which our own research budget can finance. If approaches to other financing institutions are left entirely to the discretion of the individual project monitor, the prospects of multiple financing with some institutions may well be exhausted prematurely.

4. In order to assure a coordinated approach to joint financing, Bank researchers should make their intentions explicit at the time of submitting a project to the Research Committee for approval and should undertake no contacts with

other agencies regarding parallel or joint financing unless explicitly authorized by the Research Committee. For projects already in process (or for a change in the scope of new projects requiring additional financing), the matter should be brought to the attention of me or Mr. Stern for approval before any contacts are made with other sources of financing. The Secretary to the Research Committee, Mr. D. C. Rao, should be kept fully informed of any discussions regarding joint or parallel financing as they proceed.

cc: Messrs. Baum
van der Tak
J. Adler
D.C.Rao
Members of Research Committee

EStern/HBChenery:tk

Record Removal Notice

File Title	Barcode No.
Operations - Research 1972 / 1974 Correspondence - Volume 7	30045545

Document Date	Document Type
04 January, 1974	Board Record

Correspondents / Participants

Subject / Title
SD74-1
Summaries of Discussion at Meeting of the Executive Directors of the Bank and IDA, December 4, 1973

Exception(s)

Additional Comments
Declassification review of this record may be initiated upon request.

The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.

Withdrawn by	Date
Sherrine M. Thompson	December 28, 2017

International Council for Educational Development

ICED ... Avenue New York, New York ... 212/JU 2-3970 Cable INCEDEV

Office of the Chairman

January 3, 1974

Mr. Robert S. McNamara
President
International Bank for Reconstruction
and Development
1818 H Street, N.W.
Washington, D.C. 20433

Dear Bob:

The purpose of this letter is to make an official application to the International Bank for Reconstruction and Development for its share in the cost of the study of higher education in developing countries.

The International Council for Educational Development has been asked to organize and conduct this study in behalf of the Task Force which represents the Donor Agencies who agreed to support this study in Bellagio. It is very hard to prepare a definitive budget before one has even begun operations, but on the basis of a preliminary budget of $450,000 for this eighteen-month international inquiry, the share for the International Bank for Reconstruction and Development has been determined to be $45,000. It is necessary to restate the fact that this is a preliminary budget, but the funds indicated should be forwarded to ICED at your earliest convenience, and that sometime in February there will be a meeting of the Task Force at which time a definitive and final budget will be presented. By that time we will be deep enough in our operations to have a more realistic figure of the funds necessary.

It is not necessary to restate the origins and the established mission of this project. Kenneth Thompson has recently sent a letter to all the members of the Task Force, giving a report and clarification of the arrangements agreed to at Bellagio. That letter will serve as the basis for this request.

Please be sure to let me know if there is any further information that is needed. We look forward to a meeting of the Task Force members in early February. I will certainly seek a chance to discuss this whole matter with you before then.

I can only conclude by telling you how pleased the ICED is to be involved in this enterprise which is central to its concerns. We all look forward to a most interesting period of working together on this most important task.

Sincerely,

Jim Perkins

James A. Perkins

JAP:pdp

January 16, 1974

Dear Jim:

This is in reply to your letter of January 3 in which you make an official application for the International Bank for Reconstruction and Development share in the study of higher education in developing countries which was agreed by the recent Bellagio meeting. I am pleased to learn that the International Council for Educational Development has been asked to organize and conduct the study, from which we expect useful results.

As you may know, I was unable to attend the Bellagio meeting last November but I did write in advance to Champ Ward indicating the Bank's support in principle of the project and pledging a contribution of $35,000 as the Bank's share of a total cost of $350,000 estimated at that time.

I should like you to know that the Bank still supports this project and that its initial pledge of financial support is still valid. I look forward to your presenting a firm budget for the project and note that you expect one to be available following the meeting of the Task Force in February. I am not concerned about a moderate increase in the Bank's assessed share and while there are limits to the amount the Bank may feel justified in allocating to this project, I trust that at that time we would be able to agree upon a suitable contribution by the Bank.

Sincerely,

(Signed) Robert S. McNamara

Robert S. McNamara

Mr. James A. Perkins
Chairman
International Council for Educational Development
680 Fifth Avenue
New York, New York 10019

DSB

DSBallantine:jsc
cleared with and cc: Mr. Baum

O.P. Research

Mr. Francisco Thoumi - ECDND

January 3, 1974

Vinod Prakash - ECDND VP

Terms of Reference: Invitation from the Boston University to Participate in the Seminar on "The Second Shift Project" in Latin America. January 7-11, 1974

1. On January 7, you will proceed to Bogota, Colombia, to participate in the seminar on "The Second Shift Project" (RPO-225) which has been organized by the Center for Latin American Development Studies of Boston University. You will also read your paper "A Report on Industrial Capital Utilization in Colombia", which you prepared for this research project.

2. On or about January 11, you will return to Washington, and will write a back-to-office report.

3. This trip's entirel expenses will be paid directly to you by the Center for Latin American Development Studies of Boston University.

VPrakash:dvh

c.c. and cleared with Mr. E. Hawkins EH

cc: Mr. Zenick - CPDII

ON RESEARCH (TELECOMMUNICATIONS)

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IMPERIAL BOARD OF TELECOMMUNICATIONS OF ETHIOPIA, HEAD OFFICE

የቴሌ ቍጥር
Tel No. 50500

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Telegram Address: Gentel Addis Ababa
Telex No. 21000
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Your Ref.

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Our Ref.: PpIn/R/T/1

የፖ. ሣ. ቍ. 1047 አዲስ አበባ ኢትዮጵያ ፤
P. O. Box 1047, Addis Ababa, Ethiopia

January 1, 1974

Mr. C. P. Vasudevan,
Chief, Telecommunications Division,
Public Utilities Department,
International Bank for Reconstruction
and Development,
1818 H. Street, N. W.,
Washington, D.C. 20433.
U. S. A.

Dear Mr. Vasudevan,

RE: RESEARCH PROJECT ON RURAL TELECOMMUNICATIONS

This refers to your letters of August 15 and December 4, 1973 with regard to the possibility of using Ethiopia as one center for making research and getting useful data on the impacts of telecommunications on rural development.

The Ethiopian Government, fully aware of the need to raise the standard of living of the 90% of the rural population, is putting a considerable emphasis on rural development as one of its main development targets. To this effect, the Government requires the various Development Ministries and Agencies to devote a substantial amount of their resources to regional distribution and rural penetration.

The Imperial Board of Telecommunications of Ethiopia, cognizant of such Government policy has, within the limits of its financial and manpower resources, been genuinely trying to expand its services to the rural areas in spite of the fact that such service expansions constitute a marked drain in its financial resources. Viewed from the private profitability point such expansions are uninteresting as most of the small towns are not even capable of generating sufficient revenue to cover their corresponding operating costs.

TELECOMMUNICATIONS DIVISION
Date Rec'd JAN 11
Date Ack'd Jan 15
Assigned to Dickenson
Control No: /

RECEIVED

1974 JAN 10 PM 4: 14

COMMUNICATIONS
SECTION

Viewed from the social profitability point and considering that communication serves as an essential infrastructure and as a catalyst for development of the primary sectors of the economy, however, the picture could be altogether different.

While the Imperial Board of Telecommunications of Ethiopia is aware of its social obligations and its responsibility in sharing the burdens of development, it has been facing increasing constraints in its abilities along these lines. For one, IBTE, as an autonomous self-financing organization, is required to orient its investment activities toward profit generating projects. For another, IBTE is expected to invest in directly non-profitable rural developments. These, obviously, are two rather conflicting objectives for which a balance and rational mix is a must to ensure the survival and growth of the organization. To make matters worse the Government has now withdrawn its indirect subsidy which was granted to the Board in the form of exemption of taxes and duties. Such state of affairs would naturally impose a serious constraint on the abilities of IBTE to effectively contribute in the rural penetration in the future.

IBTE, nevertheless, believes that the expansion of telecommunication services to the rural Ethiopia, viewed from the national point, is an essential infrastructure requiring some priority consideration. Communication is important, as is known, for Government administration, security, business and communal needs. It is also equally important for development.

When considered from the development point of view, however, telecommunication cannot be viewed in isolation. Other infrastructures like road needs must also be planned simultaneously. Rural electrification and availability of potable water are essential. What is also important is that the primary sectors must be planned and programmed simultaneously to benefit from such and other infrastructures.

IBTE, on its own, has been making some sort of unsystematic studies of IBTE's efforts in rural penetration of telecommunication services but it has not so far tried to determine conclusively the effect of such services on rural development and the benefits on the rural community as a whole. Although its usefulness to the rural population cannot be denied the degree and extent of its usefulness is yet to be determined. Its priority needs vis-a-vis other infrastructural and social needs are also yet to be seen.

It is the belief of IBTE that the proposed research and study on rural telecommunication will be highly beneficial to answer various questions and determine the role of telecommunication in the development process of the developing economies. IBTE further believes that Ethiopia will adequately serve to provide the required data and serve as an appropriate experimental ground for the intended research.

Following your suggestion IBTE has contacted the newly formed Institute of Development Research (IDR) of the Haile Selassie I University which is set up to carry out such research projects in Ethiopia in all fields of endeavour.

Although at the moment they seem to be fully booked with a variety of projects, they have, nevertheless, shown a serious interest in the project. We have not yet come up to serious contractual discussion, but they have promised to prepare a formulation of the study based on further discussion. As of now they foresee the combined services of a sociologist, an economist and a geographer. It was expected that the conceptual framework for the study would be prepared by the end of January.

As of now nothing substantial has yet been done with regard to selection of researchers and the formulation of the conceptual framework. We believe, therefore, that the arrival of Mr. Warford at this stage will not only help stimulate further interest in the project but will also help in the formulation of the conceptual framework of the project.

We have already informed the IDR people of the intended visit of Mr. Warford and they have agreed to be available for discussion around the middle of January. It will, however, be necessary to inform them of the exact date of his arrival as early as possible so that they will make the necessary preparation for the meeting.

Yours sincerely,

Betru Admassie
General Manager

cc. Mr. J. M. Malone Jr.
Resident Representative of IBRD
Addis Ababa.

CP Research

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IMPERIAL BOARD OF TELECOMMUNICATIONS OF ETHIOPIA, HEAD OFFICE

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Tel No. 50500

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Telegram Address: Gentel Addis Ababa

Telex No. 21000
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Your Ref.

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Our Ref.: PpIn/R/T/2

የፖ. ሣ. ቍ. 1047 አዲስ አበባ ኢትዮጵያ ፤
P. O. Box 1047, Addis Ababa, Ethiopia

January 1, 1974

Mr. C. P. Vasudevan,
Chief, Telecommunications Division,
Public Utilities Department,
International Bank for Reconstruction
and Development,
1818 H. Street, N. W.,
Washington, D.C. 20433.
U. S. A.

Dear Mr. Vasudevan,

RE: RESEARCH PROJECT ON RURAL TELECOMMUNICATIONS

This refers to your letters of August 15 and December 4, 1973 with regard to the possibility of using Ethiopia as one center for making research and getting useful data on the impacts of telecommunications on rural development.

The Ethiopian Government, fully aware of the need to raise the standard of living of the 90% of the rural population, is putting a considerable emphasis on rural development as one of its main development targets. To this effect, the Government requires the various Development Ministries and Agencies to devote a substantial amount of their resources to regional distribution and rural penetration.

The Imperial Board of Telecommunications of Ethiopia, cognizant of such Government policy has, within the limits of its financial and manpower resources, been genuinely trying to expand its services to the rural areas in spite of the fact that such service expansions constitute a marked drain in its financial resources. Viewed from the private profitability point such expansions are uninteresting as most of the small towns are not even capable of generating sufficient revenue to cover their corresponding operating costs.

Original to: Mr. Vasudevan
Date: JAN 10 1974

Viewed from the social profitability point and considering that communication serves as an essential infrastructure and as a catalyst for development of the primary sectors of the economy, however, the picture could be altogether different.

While the Imperial Board of Telecommunications of Ethiopia is aware of its social obligations and its responsibility in sharing the burdens of development, it has been facing increasing constraints in its abilities along these lines. For one, IBTE, as an autonomous self-financing organization, is required to orient its investment activities toward profit generating projects. For another, IBTE is expected to invest in directly non-profitable rural developments. These, obviously, are two rather conflicting objectives for which a balance and rational mix is a must to ensure the survival and growth of the organization. To make matters worse the Government has now withdrawn its indirect subsidy which was granted to the Board in the form of exemption of taxes and duties. Such state of affairs would naturally impose a serious constraint on the abilities of IBTE to effectively contribute in the rural penetration in the future.

IBTE, nevertheless, believes that the expansion of telecommunication services to the rural Ethiopia, viewed from the national point, is an essential infrastructure requiring some priority consideration. Communication is important, as is known, for Government administration, security, business and communal needs. It is also equally important for development.

When considered from the development point of view, however, telecommunication cannot be viewed in isolation. Other infrastructures like road needs must also be planned simultaneously. Rural electrification and availability of potable water are essential. What is also important is that the primary sectors must be planned and programmed simultaneously to benefit from such and other infrastructures.

IBTE, on its own, has been making some sort of unsystematic studies of IBTE's efforts in rural penetration of telecommunication services but it has not so far tried to determine conclusively the effect of such services on rural development and the benefits on the rural community as a whole. Although its usefulness to the rural population cannot be denied the degree and extent of its usefulness is yet to be determined. Its priority needs vis-a-vis other infrastructural and social needs are also yet to be seen.

It is the belief of IBTE that the proposed research and study on rural telecommunication will be highly beneficial to answer various questions and determine the role of telecommunication in the development process of the developing economies. IBTE further believes that Ethiopia will adequately serve to provide the required data and serve as an appropriate experimental ground for the intended research.

Following your suggestion IBTE has contacted the newly formed Institute of Development Research (IDR) of the Haile Selassie I University which is set up to carry out such research projects in Ethiopia in all fields of endeavour.

Although at the moment they seem to be fully booked with a variety of projects, they have, nevertheless, shown a serious interest in the project. We have not yet come up to serious contractual discussion, but they have promised to prepare a formulation of the study based on further discussion. As of now they foresee the combined services of a sociologist, an economist and a geographer. It was expected that the conceptual framework for the study would be prepared by the end of January.

As of now nothing substantial has yet been done with regard to selection of researchers and the formulation of the conceptual framework. We believe, therefore, that the arrival of Mr. Warford at this stage will not only help stimulate further interest in the project but will also help in the formulation of the conceptual framework of the project.

We have already informed the IDR people of the intended visit of Mr. Warford and they have agreed to be available for discussion around the middle of January. It will, however, be necessary to inform them of the exact date of his arrival as early as possible so that they will make the necessary preparation for the meeting.

Yours sincerely,

Betru Admassie
General Manager

cc. Mr. J. M. Malone Jr.
Resident Representative of IBRD
Addis Ababa.

International Council for Educational Development
680 Fifth Avenue New York, New York 10019 (212) JU 2-3970 Cable INCEDEV

December 27, 1973

Mr. Duncan Ballantine
Director, Education Department
IBRD
1818 H Street, N.W.
Washington, D. C. 20433

Dear Duncan:

The attached memorandum of understanding has been revised and tightened up on the bases in terms of the requirements of certain donor agencies. Since it is urgent that we proceed as rapidly as possible with signatures, I would hope you might review it promptly. If we do not hear from you within ten days of the date of this letter, we shall assume it meets with your approval. Once you have indicated your changes, I shall incorporate them in a final version.

As I understand the procedures, each donor agency will have to sign all twelve copies and return them to me at ICED (or we can deliver them to you and await their signature). Once all twelve copies are signed, we shall return an official copy signed by all agencies for your files.

I look forward to hearing from you at your earliest convenience.

Sincerely,

Ken

Kenneth W. Thompson

Duncan - I know you have not given us a firm answer on the $45,000 but we needed a figure for the memorandum which the UN Agencies in particular insist we prepare. Any discrepancies can be adjusted in the final draft.

PARTICIPATING DONOR AGENCIES

AND

THE INTERNATIONAL COUNCIL FOR EDUCATIONAL DEVELOPMENT

Memorandum dated December 28, 1973 between the states and institutions hereinafter specified.

I. INTRODUCTION

In the past few years, voices both public and private, national and international, have been raised to express a growing concern with formal education in both the developed and developing world. The concern has arisen not solely because of rapidly expanding enrollments, too few teachers, inadequate finance, or antiquated facilities, though these have been importantcontributors. Rather, the real cause of concern relates to the apparent maladjustment between the educational system at all levels and the needs and aspirations of the societies it is intended to serve.

While recognizing that many universities and other post-secondary institutions in less-developed countries have been found to be a least as dysfunctional and disoriented as educational institutions in lower levels, it is important to remember that these systems of higher education now have and will continue to have a near monopoly of the training of national leaders both for public and private life. The great majority of those who will be in positions to influence the future course of development in the LDC's in ten or fifteen years are in their universities and other post-secondary institutions today.

These are not simply the views of external observers; they are fully shared by many university and political leaders in the developing countries. Some are making significant progress in bringing the resources of their universities to bear on the problems of development.

The central importance of these universities and other higher educational institutions provides sufficient justification for a renewed look at the role which they can play, with appropriate donor agency assistance, in achieving national development aspirations.

While recognizing the wide variety of development aspirations and the diversity of political and institutional structures in LDC's, the success or failure of higher educational assistance efforts should be measured not in terms of the international academic reputation of a particular scholar or cluster of scholars, but rather in terms of the degree to which higher education has participated in and contributed toward the delineation and solution of pressing developmental problems.

Recognizing the central role of development as a standard for evaluating education, the Task Force in Higher Education for Development (composed of representatives from the Donor Agencies listed in Appendix A) have agreed to sponsor a study on current activities and attitudes in the LDC's, on opportunities for concerted donor agency support for especially effective and/or promising LDC higher education projects for development, and on mechanisms for institutionalizing multi-donor support for socially productive innovations in LDC higher education. The Task Force has requested the International Council for Educational Development (ICED) to carry out the study on its behalf.

This Memorandum sets forth the understandings reached between the signatory agencies and the International Council for Educational Development with respect to the study, and establishes the basis on which the parties are prepared to contribute towards its implementation.

II. IMPLEMENTING INSTITUTION

The name of the organization carrying out the study is the International Council for Educational Development (ICED). The ICED is an independent, non-profit organization with an international board incorporated under the laws of the state of New York. It is concerned with the role of education in the social and economic advancement of all nations.

III. PURPOSE

The purpose of the enterprise will be to undertake a major review of education in the LDC's by a Working Group of leading and respected authorities on higher education in developing nations, who will engage in extensive study, site visits, and analyses of higher educational systems and institutions in the developing countries.

At the end of the initial period a comprehensive report will be prepared which after review by the Task Force will be presented to the Heads of Donor Agencies at a meeting scheduled for Bellagio, Italy, in May 1975.

IV. RESPECTIVE RESPONSIBILITIES

(a) the states and institutions listed below (the Initial Donors) have agreed to contribute the respective amounts hereinafter specified:

Initial Donors	Amount of each Contribution
Canada	$ 40,000
Ford Foundation	85,000
Inter-American Development Bank	45,000
Republique Francais	In Kind
Rockefeller Foundation	85,000
United Nations Development Programme	45,000
United Nations Organization for Educational and Scientific Cooperation	In Kind
United Nations Children's Fund	45,000
United Kingdom of Great Britain and Northern Ireland	In Kind
United States of America	85,000
World Bank	45,000

(b) the ICED has agreed to carry out the study on behalf of the Task Force, and specifically to:

(i) report to the Task Force on the kinds of educational programs and experimental services (including educational, research, and extension) to promote development which a sample of post-secondary institutions are now performing, plan to supply, or might undertake;

(ii) report and make recommendations to the Task Force on ways and means by which cooperative donor support of experimental developmental activities might increase the capacity of these institutions to more directly serve the needs of their nations;

(iii) report on relationships between existing and/or planned developmental services and the building of indigenous teaching and research capacity through appropriate training both at home and abroad.

(iv) will organize a working group to undertake a study to follow broadly the defined purposes and terms of reference set forth by the Task Force and including an understanding of the end product and types of follow-up action desired. Within these parameters, the ICED Working Group will draft a proposed study plan for accomplishing the desired results, to be reviewdd and discussed with the Task Force.

(v) will have full responsibility and authority for carrying out the study with close liaison being maintained with the Task Force. An individual, to be mutally agreed upon between the Task Force and ICED, will provide liaison to facilitate the close collaboration required between ICED and the members of the Task Force.

(vi) All Task Force members will be invited to help make available pertinent documentation and other resources of their respective agencies, including the cooperation of their field staff. They will also be asked to review critically and make suggestions on drafts of case studies and the final analytical material. Task Force members may be asked to participate on field investigation teams in their individual capacities for the value their experience will have for the project.

(vii) ICED will establish a special office to be called the Office of the Education for Development Program and a Program Director with appropriate staff which will exercise day-by-day supervision of the study. The office will be located at 680 Fifth Avenue, New York, New York, U.S.A., at the headquarters of the International Council for Educational Development. The Heads of the Donor Agencies are sponsors of the study and will receive the final report.

V. FINANCING

(a) Financial support of up to $475,000 will be provided by donor sponsors of the Task Force to ICED according to the schedule in para. IV (a) above. The ICED will administer these funds on behalf of the donors and provide full accounting to the donors.

(b) ICED will carry out its responsibilities in the form of a semi-annual report containing appropriate information with respect to receipts and disbursements and balance in the Account. It will make a final financial report to the donors after the conclusion of the study.

(c) Any funds which may remain unexpended at the end of the study will be refunded to the donors in direct proportion to their respective contributions. In the event of premature termination of the project any unexpended funds will be refunded in like manner.

(d) It is understood that contribution to the study does not imply any commitment regarding future assistance to any educational institution or activity that may be identified as a result of the study.

This Memorandum of Agreement shall become effective when it have been signed by at least four donors and the ICED, and the later shall have notified the donors that the Account has opened.

In WITNESS whereof the parties hereto, acting through their representatives duly authorized, have signed the present Memorandum of Agreement.

SIGNED:

_______________________________________ Date: ____________
Canada

_______________________________________ Date: ____________
Ford Foundation

_______________________________________ Date: ____________
International Council for Educational Development

_______________________________________ Date: ____________
Inter-American Development Bank

_______________________________________ Date: ____________
Republique Francais

_______________________________________ Date: ____________
Rockefeller Foundation

_______________________________________ Date: ____________
United Nations Development Programme

_______________________________________ Date: ____________
United Nations Organization for Educational and Scientific Cooperation

_______________________________________ Date: ____________
United Nations Children's Fund

Date:

United Kingdom of Great Britain and Northern Ireland

Date:

United States of America

Date:

World Bank

APPENDIX A

Mr. Duncan Ballantine
Director, Education Department
IBRD
1818 H Street, N.W.
Washington, D. C. 20433

Monsieur Jacques Grunewald
Conseiller des Affaires Etrangeres
Section des Etudes Generales
Ministere des Affaires Etrangeres
37, Quai d'Orsay
Paris 7e, FRANCE

Mr. A. R. MacKinnon
Special Advisor
Policy Branch
Canadian International Development Agency
122 Bank Street
Ottawa KIA 0G4, CANADA

Mr. William T. Mashler
United Nations Development Programme
866 United Nations Plaza
New York, N.Y. 10017

Mr. D. Najman
Director, Department of Higher Education and the
Training of Educational Personnel
UNESCO
7, place de Fontenoy
75700 Paris, FRANCE

Mr. Robert Schmeding
Deputy Director
Office of Education & Human Resources
Bureau for Technical Assistance
Agency for International Development
Department of State
Washington, D. C. 20523

Mr. Tarlok Singh
Deputy Executive Director
UNICEF
866 United Nations Plaza
New York, N. Y. 10017

Mr. J E C Thornton
Chief Education Adviser
Overseas Development Administration
Foreign and Commonwealth Office
Eland House, Stag Place
London SW1E 5DH
United Kingdom

Dr. Michael P. Todaro
The Rockefeller Foundation
111 West 50th Street
New York, N.Y. 10020

Mr. F. Champion Ward
The Ford Foundation
320 East 43rd Street
New York, N.Y. 10017

Dr. Alfred C. Wolf
Program Advisor to the President
Inter-American Development Bank
808 17th Street, N.W.
Washington, D. C. 20577

Dr. Ruth Zagorin
IDRC
P.O. Box 8599
Ottawa 8, Canada

Central Files

Research

OFFICE MEMORANDUM

TO: Mr. Edward V.K. Jaycox, Director, TUDER

DATE: December 27, 1973

FROM: Douglas H. Keare, Chief, ECDRB

SUBJECT: Work Program, Research Program and Budget for FY75

1. Our discussions to date have indicated, I believe, that working out new or adjusted guidelines for work in the urban field will take some months. Concerning the research program, Tony Churchill and I have talked and agreed that a rather fundamental review (of overall information requirements; the Bank's most pressing needsfor analysis, the formulation of policies and guidance of operations; ongoing work in the Bank as well as elsewhere; and the comparative advantage of the Bank and other institutions to do particular kinds of work) is in order and that such a review will take us well into Calendar Year 1974 (i.e., it cannot be accomplished in time to have an impact on our submissions to the Research Committee before FY76). At the same time, there is a need to prepare our budget submissions before January 10, which for me means January 4 as I will leave on the 5th for the Mexico Urban Survey Mission. We are also scheduled for a review of our research program by the Research Advisory Group of the Research Committee in the latter half of February.

2. Therefore, I wonder if you could indicate before the end of next week, and preferably before the end of this week, whether the following describes an approach which you would support or, if not, in what particular respects you would like us to alter it.

3. First, looking beyond FY75 and to a lesser but still substantial extent affecting FY75 as well, there are some matters on which I think we have already reached agreement. Proceeding from our general agreement that we will manage selected urban studies or aspects of urban studies for you and that our resources input into this effort will substitute in the first instance for resources we would otherwise have put into urban survey missions, and that at a later date we will finance substantial portions of our research program through this means rather than through discrete research projects funded by the Research Committee; I would like to suggest two initial steps towards making this agreement operative. First, I believe the decision criteria for our involvement in these studies should be something along the following lines: our involvement should be in a limited number of studies but, for this limited number, it should be from beginning to end, i.e., from identification of studies requirements and preparation of terms of reference through completion of the studies; it should include a mix of general urban studies, as a substitute in appropriate instances for urban survey missions to single cities (as discussed below), and studies of particular problem areas such as urban public finance and land management and use policies. Secondly, there is a need to separate urban survey missions, which we have all along recognized as having different foci, explicitly into two categories: those that deal in one way or another with national urban systems (e.g., Zaire, Zambia and Mexico), and those that deal with a particular urban area (e.g., the Philippines: Manila). The former are best viewed as providing a link between country economic work and project [illegible], are of relatively small immediate interest to you, but nonetheless very important in the longer range picture. We tend to view our role in such studies as being "developmental" only; that is, to the

extent we are successful in developing analytical approaches which are useful to the Bank, we will at some future date pass over our "models" to the Regional Offices and thereafter act mainly in an advisory capacity and provider of specific inputs to missions which will basically be organized and run by personnel in the Regional Offices. You will perhaps note that we are already moving in this direction in the case of the Mexico mission, where the personnel for this mission consist -- in addition to three members and two consultants from this Division and one member of your Department -- of Ian Scott, the country economist, who will be deputy mission chief, and Roberto Cuca, a demographer from another Division of this Department. The latter type of mission, i.e., that focusing on a particular urban area, should be handled in a way that makes it of immediate interest to you. I believe Don Strombom and I developed some interesting ideas as to how this might be done out of our Manila experience, and my perception of these will be elaborated a bit below.

Work Program: FY75

4. We would intend to split our resources available after allowing for leave time, management and policy review activities roughly equally between things called research and things called operational support. (This is a change from 60:40 last year.)

5. In our view, research, until the above mentioned review has been completed, should proceed basically along present lines, though we will continue to refine the present program and adjust it as we can to your needs. /You will, for example, see substantial changes in emphasis in the paper we are preparing for Mr. Stern and the Research Advisory Group. This will be available to you in early February./ For the present, too, there will be some, but fewer, changes. For example, Tony Churchill has suggested that we place more emphasis on public services pricing and the subsidy question. This struck a most responsive chord, as we had already requested a YP who would have both the capability and the interest to prepare a program of work on this subject in consultation with Orville Grimes in this Division, Tony and Jerry Warford in the Public Utilities Department. Given your interest, we will accelerate our efforts in this direction.

6. Concerning operational support, I would suggest a six-fold breakdown versus the three-fold breakdown of last year; however, items (a) and (b), on the one hand, and (c), (d), and (e), on the other, should be viewed as fungible within these two groups of sub-categories:

(a) Economic Mission Support (approximately one-eighth of total operational support as opposed to 20 percent in this year's budget): This would consist of participation in economic missions, preferably basic economic missions, to give whatever urban systems or regional analysis input is desired and agreed [illegible]

(b) Urban Survey Missions: National Urban Systems (30 percent of total operational support as opposed to an implied 30 percent last year): These would be modeled much along the lines of the Mexico mission, i.e., four or five persons (including consultants) from this Division, at least one from the country Division concerned, one from somewhere else in the Bank and one from you. So far, we are committed for such a mission to Egypt (which is a force majure slippage from the FY74 program) and Pakistan. Unless our analysis of the budgetary situation reveals that there are resources to do considerably more than this (and, on the first iteration, it doesn't), I would suggest that we leave it at that and try to handle all additional such requests under item (a) above. /If you agree to this approach, I would like to have the budget for items (a) and (b) with us despite what Organization and Planning and Programming and Budgeting "experts" have to say on the subject, and would very much appreciate your support to this end./

(c) Urban Survey Missions: Specific Urban Areas (20 percent of total operational support versus an implied 30 percent last year): Here I suggest that we try to cover more cities but with basically a quite different approach than we have advocated using in the past. Initially, these missions should involve no more than two or three people (with at least one each from your Department and this Division and each preferably being headed by either Venkateswaran, Don Strombom or myself). The idea would be to focus on project identification including, in addition to the project itself, requirements for project preparation, major problems of the urban area, and the design of future technical assistance and study requirements as part of the "project package" to be developed. This would be viewed very much as a first stage operation in a series of stages which is likely to vary in number, the rest of which would be handled under items (d) and (e) below. /I would suggest that we alternate management of these operations which would, ideally in my mind, imply splitting the budget for them as well; though I don't feel terribly strongly in this direction. The budget can be entirely with you if you wish, and there is no question that the budget for the following two items should be entirely with you./

(d) Project Mission Support (one-eighth of total operational support, as opposed to 20 percent last year): Our involvement in these would, I think, best be mostly or entirely in the follow-up stages to the missions under category (c) above. The nature of our involvement could vary according to your requirements.

(e) Management of Studies (one-eighth of total operational support): [illegible] [illegible] and, if you think it is likely to be more important than this even in FY75, we are prepared to make the necessary adjustments. For the moment we would like to think of our becoming involved in two cities as early as possible in FY75. Ideally, one would be a general urban study in which we would make a first attempt at developing analytical approaches to inter-sectoral and locational choice of activities/projects; one would involve in-depth analyses of public finance and/or land management policies. As our report on the Urban Survey Mission (s) to the Philippines will indicate, Manila might be a good candidate for the latter approach -- to which would be added (indeed as the first priority) assistance and/or study in the field of transport engineering, management and planning, to be managed by you. /Whatever approach we agree on, we should attempt to select cities as early in Calendar Year 1974 as possible./

(f) Monitoring (one-eighth of total operational support, which is roughly equivalent to last year): This would cover professional, special services and consultant time necessary to provide advice on data recording for all urban projects, plus the "more involved" monitoring planned for three site and services projects. It does not include time and funds for indigenous research institutions or for expatriate experts placed in the field.

cc: R. Gulhati
H. Hughes
A. Churchill
H. Dunkerley
D. Strombom
R. Venkateswaran
URED Division Members

OP-RESEARCH

Mr. Ernest Stern December 21, 1973

Jean Baneth

Cocoa

JB

1. I aplogize for being unable to attend the discussion today; I was caught up in a meeting with Mr. Rovani and his energy task force and I thought that my marginal contribution there would be somewhat larger.

2. Though I know nothing about cocoa, I have the impression that the parts of the paper dealing with the cocoa situation, essentially chapters 1 through 4, are mostly solid and well documented. I am, however, very uneasy about the recommendations for Bank policy, and more precisely about the way in which they are justified. The reasoning there seems to be at the very least fuzzy, particularly if one also views the reasoning followed in the tea paper. In fact, truth to tell, I am unable to follow the arguments which are supposed to justify the recommended Bank policy.

3. If it is true, as the paper alleges, that price elasticity of demand for cocoa is low both in the short run and in the long run, for price ranges which include and extend beyond the present and forecast prices, then there can be no justification for the recommended policy as long as cocoa producers are essentially poor and cocoa consumers are essentially rich. If we nevertheless want to justify the policy, then we have to be able to support one of the following statements:

(a) The price elasticity of demand for cocoa, while it has been low in the past, will become much higher if prices much exceed current levels for long. It is therefore in the economic interest of cocoa producers to increase production so as to keep prices around the threshold at which demand elasticity is just about equal to unity.

(b) While in purely economic terms the price elasticity of demand for cocoa is low within any reasonable present and future price range, at higher price ranges political reactions would start in consuming countries against producing countries if they are seen to be trying to increase the price. It is important for these producer countries (or for the Bank) not to create such reactions.

(c) Whatever the price elasticity of demand for cocoa, there exists a cocoa agreement with a target price that is lower than the forecast price. Therefore the Bank, in accordance with its policy of cooperating with existing commodity agreement authorities, is well within its role in helping to increase cocoa production.

4. Any of these arguments could perhaps be made; there is a hint at several of them in the paper, but the arguments are not made at all clearly and one is left with the impression that the paper rather fuzzily comes out in favor of a policy which it has throughout failed to justify.

5. Independently from these points, and while, as I said in the beginning of this note, I know nothing about cocoa, I am left with the uncomfortable feeling that the projections of demand might be too optimistic. In particular, it seems that the elasticities are derived from country estimates for the period 1947 to 1963, a time when much of Western Europe, in particular Germany, was recovering from the aftermath of the war. It is perhaps indicative, if I understand it right, that income elasticity in the United States is shown to be nil. It may well be, therefore, that the increase in demand in developing countries has been underestimated and that the present fairly high price and optimistic projections will lead to rather lean years later on.

cc: Mr. W. Tims
Mr. S. Sing

JBaneth/ylc:plc

O.P. Research

December 21, 1973

David Grove
Shankland/Cox Partnership
16 Bedford Square
London WC1B 3JH
ENGLAND

Dear David:

Thank you very much for your letter and the attached note on the hierarchy of towns in Malaysia. The results really do come out in quite an interesting fashion. In fact, after we had talked in Kuala Lumpum I did attempt to use the Yellow Pages to get some indication of medical types services, e.g. doctors, dentists, etc., but decided that the listing was both somewhat incomplete and did appear to contain some possible duplication, on the basis of some of the doctors that I knew in Johor Baru. So I therefore left it on one side.

One thing that might be interesting would be if one could at the same time try and obtain a listing of the range of services available in towns within the urban hierarchy, in order to see to what extent there is a consistency in the proportion of those businesses who (a) have telephones and (b) consider it worthwhile putting a listing in the Yellow Pages. This might give some insight into (a) scale of enterprises in different centers and (b) the extent to which the towns comprise part of the more highly developed (core) of the economy.

I don't know whether we shall do this at all, but at the moment we do have Professor Harold Brookfield of McGill University doing some preliminary work for us in the Temerloh and Kuala Pilah areas on a study to investigate the non-agricultural activities which have developed in these areas over the past few years. The aim is to get a better understanding of the types of enterprises which one might expect to develop within the new land settlement areas, and also to try and get a better feel of development of the urban hierarchy in such peripheral regions. From the preliminary word we have gotten back from him, they are finding some interesting things with respect to the effects of introduction of new, more institutionalized credit and improved communications on the linkages between commercial enterprises in particular and the results and effect on the development of regional centers. He should be producing a preliminary report in about three months and I hope to be able to let you have a copy and would be most interested in your reaction to it.

I gather from Bill Panton that considerable changes have already been taking place in Johor Baru and that they are probably expanding even more than David and I anticipated when we did our work for the earlier project. I will be most interested in the outcome of your current study.

I look forward to seeing you again some time in the new year. All best wishes.

Sincerely yours,

John C. English
Urban and Regional Economics Division
Development Economics Department

JCEnglish:dh

D.P. Research

Maurice P. Bart, Director, EMENA CP II December 21, 1973

Jacques Guillot-Lageat, Acting Chief, EMENA CP II - C

Institutions Undertaking Development and Poverty-related Research

Attached, in accordance with the inquiry from Mr. Benjenk, are notes on institutions carrying-out development and poverty-related research in Greece, Israel, Morocco and Tunisia. As you will observe, we have not yet been able to respond to the inquiry in any satisfactory fashion as far as several of the countries are concerned. Needless to say, one of the major problems in the inquiry is the definition of the institutions to be covered.

Attachments

AEElmendorf:cek

OEE

I S R A E L

Research Institutions Carrying Out Development and Poverty-Related Research

1. David Horowitz Institute of Development Research, Tel Aviv. The Programs Division has not had contact with this institute, but it may well be known in other parts of the Bank.

2. Agricultural Research Organization, Ministry of Agriculture, Tel Aviv. This agency is undertaking agricultural research aimed largely towards small farmers. It is the beneficiary of the research component under the Second Agricultural Credit project in Israel, which is soon to be presented to the Executive Directors.

G R E E C E

Research Institutions Carrying Out Development and Poverty-Related Research

Information not yet available.

M O R O C C O

Research Institutions Carrying Out Development and Poverty-Related Research

1. To our knowledge, there is only one institution in Morocco which is specifically charged with carrying out poverty oriented research, the University of Rabat, particularly through the Centre Universitaire de la Recherche Scientifique, which sponsors the Bulletin Economique et Social de Maroc. Many of the articles appearing in the Bulletin are the result of research work at the University and by private individuals on poverty-related problems.

2. There are also various bodies mainly within the public administration where work could be slanted towards poverty oriented research. They include the following:

   a) The Planning Secretariat, responsible for preparing and supervising the implementation of the development plan, one of whose stated objectives is improving income distribution;

   b) The Ministry of Agriculture and Agrarian Reform which is involved in assistance to poor farmers and which is responsible for the land reform program;

   c) Promotion Nationale, which operates a public works program mainly in the rural areas to create employment.

3. The next mission to Morocco which will discuss the draft economic report from January 28 to February 2, will also endeavour to assemble more precise information on the current research being carried out by the institutions mentioned above, and to supplement the list if possible.

T U N I S I A

Research Institutions Carrying Out Development and Poverty-Related Research

1. Centre d'Etudes et de Recherches Economiques et Sociales - University of Tunis (CERES), 23, Rue d'Espagne, Tunis. The Centre includes several specialized sections for general economics, demography, sociology, agriculture and rural development. Its studies and publications contribute to specialized knowledge and judgments on current and past developments in the country. The Centre has been involved in data collection for the Central Tunisia Rural Development Project and, according to our Tunisian acquaintances, has performed satisfactorily.

2. Bureau de Recherches Sociologiques, 8 Rue Amilcar, Tunis. We have no experience with this institution and little knowledge of its publications.

3. Centre de Recherches et d'Etudes Administratives - Ecole Nationale d'Administration, 24 Avenue du Dr. Calmette, Tunis. The Centre undertakes research in the fields of general economics, organization of institutions, and sociology. We have had no contact yet. Its studies and publications are considered of good quality.

4. Institut Tunisienne d'Economie Quantitative (Institut Ali Bach Hamba), 2, Rue de Champagne, Tunis. The Institute undertakes research in econometrics, mainly for the Ministry of Planning. Bank economic missions have had contacts with the Institute. Its approach is theoretical and model-oriented.

5. Institut National de Productivité. The Institute undertakes studies on the productivity of industrial enterprises. It is increasingly financially self-supporting. Bank economic missions have had contacts with it.

6. Centre National d'Etudes Industrielles, Tunis. The Centre does sector and investment studies in industry in close cooperation with the Ministry of National Economy and the new Investment Promotion Agency. It is well staffed with foreign technical assistance financed by UNDP. Its studies known to the Bank are of adequate quality.

7. Centre National d'Etudes Agricoles. The Centre was recently set up to undertake project preparation studies in agriculture with assistance of UNDP/FAO under the direction of a former FAO/IBRD CP official. The Centre is preparing the Central Tunisian Rural Development Project for eventual Bank financing.

8. Institut National de la Recherche Agronomique en Tunisie (INRAT), Tunis. The Institut covers applied research in a variety of fields, with specialized forestry and engineering institutes attached. It is well known for its basic research, but hardly serves the needs of the agricultural sector for applied research.

9. Institut National d'Hygiene, Tunis. This institute, under the Ministry of Health, undertakes applied research in hygiene. We have had no contact with it.

10. Institut National de Nutrition, 120, avenue de la Liberte, Tunis. This institute, attached to the University of Tunis, undertakes dietary and medical research on nutrition. We have not had contact with it.

11. Centre de Recherche et d'Experimentation du Genie Rural, 30 Rue Alain Savary, Tunis. This Center, attached to the Ministry of Agriculture, undertakes studies on irrigation, soil conservation and agricultural machinery. We have not had contact with it.

Q.P. Research

December 20, 1973

Mr. J. Birt
United Nations Development Program
Resident Representative
P.O. Box 253
Port Louis
Mauritius.

Dear John:

A brief but belated note to thank you for your courtesies during my visit in October. I have been working down in Mexico since then on what appears to be emerging as a rather major effort on rural development on the part of that government.

I am enclosing a little write up of the Mauritius Case Study which I gave to our Economic Development Institute course several weeks ago. Also, attached is a recent Finance and Development tract. The Harvard Business School is also doing a case study which is now finished. So, as usual, Mauritius is receiving no lack of publicity for this effort.

The main purpose of this note, John, is to enquire about progress or development on the livestock side. Have there been any happenings in this area?

Yours sincerely,

August T. Schumacher

Encl.

cc: Mr. Roulet
Mr. Christoffersen

AGRICULTURAL PROJECTS COURSE

1973

Session: Monday, October 29 (9:30 a.m.-12:30 p.m.).

Topic: Discussion Case - Mauritius Employment.

Speaker: Mr. August T. Schumacher (IBRD).

Readings: McGinity, R. World Bank (B) Case - Mauritius Rural Development Project. Boston: Harvard Business School, October 1973. (Attached.)

IBRD. Mauritius - Appraisal of Rural Development Project. Report No. 161A-MAS. Washington: International Bank for Reconstruction and Development, June 5, 1973. (Attached - participants only.)

McNamara, Robert S. Address to the Board of Governors, Nairobi, Kenya. Washington: International Bank for Reconstruction and Development, September 24, 1973. (Already distributed.)

Outline: None.

Additional Readings: Harvard Business School. The World Bank. Boston: Harvard Business School, 1973. (Available in the EDI Library.)

Yudelman, Montague. The World Bank and Rural Development. Washington: International Bank for Reconstruction and Development, January 15, 1973. (Available in the EDI Library.)

...S - RURAL DEVELOPMENT PROJECT

...e class should read the appropriate sections of Mr. McNamara's ...t speech and they may want to skim as well a copy of the ...se called World Bank (A).* They should be prepared to deal ... following questions during class:

(a) Is this an appropriate type of project for the Bank to be involved in?

(b) What alternative methodologies for evaluating project benefits do you suggest? See Exhibit 5.

(c) If the Bank were to proceed with this project, what problems would you expect in implementation?

(d) From your own experiences be prepared to discuss the alternative strategies of rural development.

*Available in EDI Library.

Oct., 1973

WORLD BANK (B) Case
MAURITIUS RURAL DEVELOPMENT PROJECT

From 1968 through 1972, the World Bank Group doubled its loan commitments to the world's less developed countries, assisting many of them in enlarging their GNP's significantly.[1] In doing so, the Bank maintained high standards of evaluation and followed sound financial practices. The components of each loan project were clearly defined in terms of character, location and time. The resources required - manpower, materials, and finance - were estimated carefully. These were compared to the expected benefits to the country such as cost savings, increased production, and institutional development. Costs and benefits were quantified to the extent necessary to judge a project's viability. Projects were sought which showed the possibility of achieving a rate of return approaching 20%. While it provided credit to the poorer countries, careful banking practices enable the International Bank for Reconstruction and Development to earn 6.9% on its subscribed capital in 1972.

Despite the professionalism of its approach and its accomplishments in assisting less developed countries, Mr. McNamara was dissatisfied. Mounting evidence showed that unprecedented increases in the national incomes of LDC's during the 1960s did not spread evenly among the populations of these countries. Especially distressing, the poorest population segments had failed to benefit in any significant degree whatsoever. In defining this problem, the World Bank's president referred not only to the poor of those countries which simply have very few resources, nor to the poor in particularly impoverished regions in many of the larger developing countries. Rather, he referred to the poorest 40% of the population in all developing countries, to the poverty of those who lie beyond the reach of traditional market forces, current government policies and services and available external assistance. Most distressing, the income gap between these groups and the few rich is widening in most developing countries.

As a result, Bank management believes that programs specifically designed to reduce the deprivation of the poorest groups are imperative for political as well as moral reasons. The Bank can assist such programs, but it cannot impose them on borrowing countries, for how and when a nation deals with its internal inequities is a domestic political decision. The Bank proposes, therefore, to expand its commitments to those nations which give higher priorities to goals measured in terms of human needs: nutrition, housing, health, literacy, and employment. In doing so, it is willing to risk some reduction in an individual country's measurable growth rate.

To implement this concept, the Bank is beginning to undertake a few experimental operations. While following its plan to build loan volume to $5 billion annually, the Bank is:

1/ See The World Bank (4-373-333) for a description of the World Bank Group's past and present activities, and of its reorganization in 1972

This case was prepared by R. McGinity, Research Asst., Harvard Business School under the direction of Professor R.A. Goldberg.

*increasing commitments to countries lacking per capita incomes above $120,

*emphasizing social sectors such as agriculture, education and population planning,

*using the International Development Association's "soft" loans to provide social sector projects in the poorest countries.

In these new types of projects, the Bank is not less concerned with the economic viability of projects or with measurement of their effects, but more with the relationship begween national growth and income distribution.

These experimental projects present a major challenge to the Bank. It must develop appropriate cirteria by which to evaluate their feasibility, plus yardsticks by which to grade their performance. The threat exists in these new projects that the organization might tend to relabel or redefine project characteristics in order to satisfy new criteria.

In early 1973 the Bank received a loan request which involved these new dimensions and which was unlike projects the Bank had considered previously. The Bank was asked by the new nation of Mauritius to join other lending organizations, UNDP, ODA, AID, INOCA (France), in financing a rural development project which aimed to employ a substantial number of the country's poorer inhabitants. Construction of productive and social assets benefiting the poorest segment of the rural population was the purpose of the project. Evaluation of the program would test not only the Bank's commitment to its newly proclaimed goals, but the effectiveness of its new organizational structure as well.

Mauritius 1/

Mauritius gained its independence from the U.K. in March of 1968, and is beset with many of the economic ills afflicting other newly independent, less developed nations in the world today. The Mauritian economy is heavily agricultural, and GNP (fiscal 1972: US$ 185 million) depends heavily on production and export of sugar. Per capita income has been stagnant for ten years, and the poorest 20% have per capita incomes below the level considered necessary to obtain adequate nutrition in Mauritius (U.S. $250). Unemployment affects 20% of the work force of 250,000 and another 20% is only partially employed. Investment in the island is largely French (in sugar plantations) and British. Exhibit 1 summarizes basic statistics. Exhibit 2 indicates employment levels.

1/ The 720 square mile nation of Mauritius is located 1000 miles from the East African coast in the Indian Ocean. The island rises from low-lying coast to a plateau in the center from which several rivers flow. Its population consists of Indian, African, Chinese and European groups, with the first two predominating in business and politics. The government is parliamentary. Life on the island is becoming calm again after a period of general strikes, riots, and martial law in 1971-72 following postponement of general elections until 1976 by the governing coalition. Though the island is crowded (population: 850,000), the racial groups are relatively tolerant of each other.

In 1972, Mauritius' economy expanded strongly. Cane harvests and world sugar prices were good. The Annual Report of the Bank of Mauritius emphasized that much of 1972's growth occurred in nontraditional sectors. Whereas sugar recorded a rise of 8%, other sectors recorded greater percentage increases. The tea industry and tourism emerged as important foreign exchange earners. Per capita GNP reached $240, up from $200 in 1970. Significant statistics reported included;

*increased earnings from tourism from Rs 18 million to Rs 39 million,

*increased contribution from manufacturing from Rs 141 million in 1970 to Rs 165 million in 1971,

*investment in the Export Processing Area, opened in 1970, reached Rs 6 million: exports from the zone reached Rs 4 million,

*private sector bank deposits rose about 15% to Rs 338 million from Rs 295 million in December of 1970.

*credit to the private sector rose about 17%.

To consolidate these recent economic improvements and to widen their benefits, Mauritius has embarked on an ambitious five-year plan spanning 1971 to 1975. An annual GNP growth rate of 7% is projected, with major emphasis on eliminating unemployment by creating 53,000 new jobs. A particular area of concern to Government is their desire to improve the living standard among the poor groups in the rural areas.

Life in Rural Areas

The rural villages in Mauritius are comparable to a series of labor camps spread along the edges of sugar estates and around the sites of existing or abandoned sugar mills. These rural villages relied until recently on the estates for almost all of their needs including the basic food requirements and physical amenities of a regular "community."

The estates and a few recently established tea plantations are the main source of employment to the rural villagers. A few large sugar and tea operations own 75% of the cropped land while only a small percentage is used for small holder farming. The poorest villages lack the most basic physical facilities.

The income distribution is skewed towards the landowners (10% of all landowners own 80% of all land) while 180,000 rural dwellers (40% of the landless population) make up the poorest 20% of the country. These poorest 20% receive annual incomes under the amount needed to purchase an adequate diet.

In 1962 the urban-rural income differential was nearly 45% as estimated on budget data. Ten years later this distribution had widened despite the growth in services and industry occurring in urban areas.

The Rural Development Project in Mauritius

Despite recent success/of industrial growth (6,000 jobs), forecasts indicate industry will be unable to make significant impact in alleviating the country's employment and rural poverty problems before 1980. Therefore government, with substantial IDA assistance, developed a program which attempts to address these problems during this period. Its basic objectives were:

*reduction of unemployment among males over 16 years of age,

*training and hiring male Mauritians in labor-intensive projects for construction of productive assets,

*ensuring that the benefits of the project accrue to the poorest 20% of the rural population:

The project consists of two related parts: agricultural development and village improvement. The agricultural development phase consists of three parts: bench terracing, fodder planting and reforestation. The village improvement phase involves constr uction of roads, village centers and markets plus provision of water and health services.

Agricultural Development

About 1000 acres (of a potential 13,500) would be terraced over two years as a pilot project. Ninety-four percent of the cost of these projects would be labor. Of the terraced area, half would be on lands currently owned by marginal subsistence farmers and the remainder are government lands. The latter area would be subdivided into 2-acre plots by the Ministry of Agriculture. It would then be allocated to landless householders from the poorest rural villages by their village councils and the Rural Development Committee of the Cabinet which would be established to oversee the development program. (As a covenant in the potential loan agreement, IDA obtained assurance from the Mauritian government that any land brought into production through terracing would be leased to landless householders from the poorest 20% of the rural population.)

Fodder would be planted on 500 acres to enable increased milk and meat production from existing herds. Householders would be allowed the right to harvest fodder for a fee of US$ 13.33 per acre per year. Land would be cleared and planted in units of 10-30 acres adjacent to poor villages among those selected for village improvements.

4000 acres of scrub land were identified by IDA's land use planners as suitable for reforestation. More productive species of pine and eucalyptus would be planted rather than those types now grown. The labor requirement for establishment of pine and eucalyptus stands is heavy - 250 men/acre - and labor cost would be 95% of the total. Reforestation would also require construction of about 20 km. of unpaved logging roads.

Village Improvement

Basic facilities and services would be to rural villages selected from among the poorest. Roads, community centers, rural health clinics, market centers and public water taps would be constructed using labor-intensive techniques. District councils would be responsible for managing and maintaining rural roads, markets and centers. Health centers would be overseen by the Health Ministry and the Central Water Authority would assume responsibility for public water facilities.

In addition to material facilities, a village self-help project would be introduced. Assisted by a Village Development Officer, people in the poorest villages would be encouraged to develop schemes which benefited the village directly (fodder area fencing, fruit tree planting, recreation field construction, gardens, cattle, rabbit and poultry cooperatives, etc.). All labor required would be contributed by the villagers, but material valued in total up to $2780 would be provided to each of the participating rural villages.

Exhibit 3 summarizes cost estimates for both phases of the project. Exhibit 4 gives a breakdown of the estimated financing.

Project Administration

To coordinate the project, the Ministry of Economic Planning established a Rural Development Unit to supervise project planning and execution. The Unit includes a chief, the staff required to coordinate the village improvement program, and two economists as evaluators. The project planning units of individual ministries would be strengthened to ensure ministerial cooperation on followup maintenance and staffing of initial projects and an adequate inventory of labor-intensive projects to be accomplished in the future.

Actual construction of the project work, would be the responsibility of the Development Works Corporation, a government organization. The Board of the DWC consists of one representative each from the Ministries of Finance, Works, Agriculture, Local Government, Economic Development and Planning and Employment, plus five additional members and a chairman appointed by the Prime Minister. The Board of theDWC establishes its policy and determines the conditions of service of its officers and workers. The General Manager of the DWC is responsible to the Board for execution of DWC policy and management control of its day-to-day business.

Certain difficulties might attend DWC management of the Rural Development Project. Because it was used primarily to employ large numbers of people on labor-intensive public works programs, the Ministry of Employment had begun to exercise a lot of day-to-day administrative control. Moreover, the Chairman had usurped more of the operating responsibilities of the General Manager. Consequently, apprehension existed among some Bank members that the DWC might not be fully effective in the objectives of the Rural Development Project.

Project Benefits

The benefits expected from the Rural Development Project were grouped in five broad areas: production, village improvement, employment and training and income distribution. Bench terracing and fodder planting were expected to result in increased production of fruit, vegetables and milk worth Rs 25 million at full development. Though sensitive to predicted wage rates, these components were expected to show rates of return of 17 percent and 14 percent respectively. (See Exhib. F 5). Forestry was expected to return only 7 percent. In spite of this fact, the forestry program is planned on a larger scale because the industry is organized and functioning in Mauritius, whereas terracing and fodder planting are untried efforts.

Village improvement, the largest component of the project, should result in marked improvement of the living standards in the poorest villages. Most of the benefits will be direct consumption of services, and no attempt has been made to quantify them nor estimate a rate of return. Plans do exist, however, to assess the impact of village improvement on various indicators of village welfare.

Exhibit 5 shows the increased employment resulting from the project. The disparity between temporary and permanent jobs is inevitable, given the use of labor-intensive construction methods. Since the growth of industry is expected to alleviate the unemployment problem in the medium and long term, emphasis on short-term labor creation is considered justified at present. The training which new workers will receive in skilled trades and repair work will qualify them for positions outside the relief effort.

The project will assist in distributing Mauritian income more evenly. The jobs created during the implementation phase will be filled by men and youths currently on the unemployment register or employed as relief workers.

In addition, the selection procedure by which specific villages are included in the improvement scheme ensures that most are drawn from the poorest villages. Six geographical areas have been selected in order to concentrate resources for effective program implementation and to support communities known to be socially and economically viable in the long term. A total of about 130,000 people in these areas will benefit from the village improvement program, 24% of the island's total rural population.

Other benefits will accrue from the project. Although only a modest 1000 acres are included in the terracing component, a total of 13,500 acres of land capable of improvement by terracing has been identified. Thus, the project may point the way to increasing the island's arable area by 6 percent. Environmental benefits may result as well, such as control of soil erosion through terracing and the lessening of flooding in the Port Louis area by the forestation of the watershed slopes surrounding the city.

Bank Appraisal of the Mauritius Project

The Mauritian Rural Development Project was challenging to the Bank Group for three reasons. First, it could not be evaluated as a conventional loan request. New evaluation criteria are needed. Second, it was one of the first requests of this kind to be considered by the Bank since its reorganization. Third, the project is backed by a management group which believes a coordinated approach to rural development is needed, rather than the traditional sectoral one which according to this group, attacks rural problems piecemeal.

To cope with the first challenge, the Bank constructed a village poverty index for identification and selection of those villages most in need of help. Major elements in the index were village unemployment, availability of water, electricity, communication, markets, schools, clinics and halls, housing conditions and transport facilities. Weights were established and assigned to construct an index of village poverty for all locations, ranging in size from under 20 to over 2000 households. The index would be used in conjunction with more conventional economic measurements such as ROI to ensure that those areas most in need of the loan benefits are targeted to receive them.

Some Bank staff members were distinctly uncomfortable with this new approach, however. They felt that project evaluation was in danger of becoming too subjective if it was to be based on assessments of income distribution and quality of life. Questions were asked such as:

1) What ~~village~~ is a valid standard of income distribution?

2) Would subsidies be justified if a project's main objective is improvement in the standard of living of a large number of peasant farmers?

3) What is the order of priority of the Bank's objectives (e.g., rate of return, social development, quality of life)? Is the order to change in different situations? If it is, who is to decide priorities in specific instances?

4) Should the Bank become involved in a government's employment or wage policies as it has already in agricultural or other sectoral matters?

In short, a number of Bank staff feared that "conventional" loan evaluation criteria no longer applied and new, clearly defined criteria had yet to be provided.

A second source of uncertainty in evaluating the Mauritius request grows out of the Bank's decentralization. In 1972, the Bank shifted from a centralized, sectoral (transport, power, agriculture) organization to a regionally based form in order to link more closely country and sectoral knowledge, and to permit greater decentralization of decision making. Consequently, some staff members assumed the East African region would be responsible for appraisal of the Mauritius project. However, because of the project's novelty and the substantial input of Bank staff work necessary in it, Bank management decided that the Central Project Staff should retain responsibility for appraisal and administration of the loan if it were approved. Often, however, the Central Projects Staff was compelled to draw on the talents of the East African Division, and particularly on its Agricultural Department. Some friction resulted.

A final source of uncertainty involved the group which developed the project and guided it through the Bank. These men, in the Agricultural Division of the Central Projects Staff, made up an informal two man rural development unit. They believed that their unit and the rural development concept should be an on-going aspect of the Bank's efforts.

Operationally they feel that a central non-regional small projects group could serve a number of functions in carrying forward the new rural development mandate .

1. Assist regions with staff in developing their own rural development project pipelines.

2. Develop operational policy guidelines for rural development projects from Bank and other agencies' experiences with rural development projects.

3. Develop a small number of rural development projects annually (4-5) which have innovative rural development aspects.

4. Monitor and coordinate the rural development research policy and project work of the various Bank departments engaged in rural development work.

These views were skeptically received by some Bank officers coming as they did on the heels of a major reorganization. To other officers, they appear to be a logical out-growth of the Mauritius development project and all the goals the Bank has set for itself in this field.

Exhibit 1

WORLD BANK (B)

Basic Statistics, Mauritius: 1970

out of date
Use latest econ report

Area		720 sq. miles
Population		850,000 (est.)
GNP per capita		1,051 Rupees
Trade		
Imports	1969	358 mm Rs
	1970	400 mm Rs
Exports	1970	363 mm Rs
	1969	347 mm Rs
Currency	1R = US $0.19	

Source: Financial Times, March 23, 1972.

Exhibit 2

WORLD BANK (B)

Labor Statistics, 1972

	Labor Force	Employment	Relief and Development Workers	Unemployment
Males:				
15-20	40,700	22,000	None	18,700
21 and over	175,100	153,100	20,900	1,100
Females	49,500	38,600	None	10,900
	265,300	213,700	20,900	30,700

Source: International Bank for Reconstruction and Development: Mauritius: Rural Development and Employment Creation Project, March 23, 1973.

EXHIBIT 3

WORLD BANK (B)

Cost Estimates
------'000------

		Rupees Local	Rupees Foreign	Rupees Total	US$ Local	US$ Foreign	US$ Total	Foreign Exchange Component %
1.	Bench Terracing	5,500	300	5,800	1,000	60	1,100	1
2.	Afforestation	7,000	1,400	8,400	1,300	300	1,600	2
3.	Fodder	1,800	210	2,000	300	40	370	1
4.	Rural Village Improvement							
	a. Access & internal roads	7,610	3,260	10,870	1,410	600	2,010	30
	b. Community centers	680	460	1,140	130	90	220	41
	c. Market centers	650	430	1,080	120	80	200	40
	d. Water supply	340	410	750	60	80	140	55
	e. Health services	1,920	1,280	3,200	360	240	600	40
	f. Productive self-help	320	970	1,290	60	180	240	75
	Sub-total	11,520	6,810	18,330	2,140	1,270	3,410	37
5.	Technical and Consultant Services 1/	440	1,320	1,760	80	240	320	75
6.	Training	330	930	1,260	60	170	230	74
	Sub-total	26,584	10,962	37,536	4,870	2,070	7,010	29
7.	Contingencies	3,460	1,430	4,880	630	270	910	31
	TOTAL	30,040	12,390	42,420	5,500	2,340	7,920	30

1/ Includes supporting vehicles and equipment.

Source: World Bank, Appraisal of Rural Development Project, Mauritius, March 1973.

Exhibit 4

WORLD BANK (B)

Personal

Financing
US$ '000

	Villagers	Government	UNDP and Bilateral[3/]	IDA	Total
1. Bench Terracing	-	340	210	550	1,100
2. Forestation	-	540	260	800	1,600
3. Fodder	-	140	50	180	370
4. Rural Village Improvement					
a. Scheduled items[1/]	-	510	780	1,300	2,590
b. Productive self-help	560	120	-	120[2/]	800
5. Technical and Consultant Services	-	20	220	80	320
6. Training	-	10	150	80	230
7. Unallocated[2/]	-	520	-	400	910
Total	560	2,190	1,670	3,500	7,920
%	7	28	21	44%	100%

1/ Internal and access roads, community centers, market centers, water supply, rural health clinics.

2/ Only materials would be eligible for 50% reimbursement.

3/ USAID ($900,000 for food aid), UNDP ($30,000 for project preparation and mapping assistance). France ($150,000 for training assistance), UK ($450,000 for DWC management support, vehicles and equipment), India ($140,000 for DWC management support).

Source: World Bank, Appraisal of Rural Development Project, Mauritius, March 1973.

Exhibit 5

WORLD BANK (B)

Rem

	MAN - YEARS		
	Temporary Workplaces		Permanent Workplaces
Project Component	Year 1	Year 2	Resulting from Investment
Bench Terracing	1600	1600	400
Fodder Planting	500	500	2/
Forestry	1900	2200	300 3/
Village Improvements			
*Planned items	1500	2400	300
*Self-help	300	500	--
	5800	7200	1000

1/

2/ The fodder component will enable presently underemployed villagers to perform more and more productively.

3/ About 300 permanent jobs will be created for years 16 through 22, and about 600 during land clearing for years 23-26.

Source: World Bank, Appraisal of Rural Development Project, Mauritius, March 1973.

Structure and Problems of Agriculture

Unused arable land in Mauritius is scarce, amounting to 36,000 acres. Substantial investment in irrigation, destoning and terracing is required to make it productive. Substantial investment in irrigation, destoning and terracing is required to make it productive. Because of the scarcity of land and the investment needed to improve it, forty percent of rural householders are landless and sixty percent own or rent an average of 3.5 acres.

Sugar

214,000 acres (46% of the island's land area) are used for sugar production. Of this area 53% is controlled by large estates while 47% is divided among 24,000 owners. The estates produce an average of 33 tons per acre while smaller growers only manage 21 tons per acre. Inadequate water, destoning machinery, fertilizer and extension services for the smaller growers are primarily responsible for this gap.

Most of the tasks in the sugar industry are accomplished by hand and mechanization is rare. The industry employs 55,500 full-time and 5,500 part-time workers. While the rocky nature of the cane growing areas has contributed to the scarcity of mechanization, rising labor costs are making mechanization of large plots more attractive to their owners.

Tea

The tea industry employs 10,000 persons (many part time) on 12,000 acres of land. Acreage is split about equally between estates and small tenant growers. Prospects for expansion of the tea industry are limited because of rising labor costs and decreasing international prices.

Food and Orchard Crops

Small holdings and small-scale hand irrigated vegetable gardens account for the remaining 5000 acres of cultivable land. About 15,000 acres of newly planted sugar cane are interplanted annually with ground nuts, potatoes, and vegetables. If improvements were made, a proportion of the 36,000 acres of unused land would be suitable for mixed crops and some small holder production.

Livestock

Livestock is raised on a part-time basis with a low level of technical efficiency. Very few cow-keepers depend on livestock for their sole source of income and over 40% of them supplement their incomes by maintaining small cane fields. Programs for improving the quality of milk and the efficiency of its distribution have failed, and the rural cow-keeper remains one of the poorest members of Mauritian society.

About half the nation's total consumption of meat and dairy products is supplied by imports. Expansion of the industry for purposes of import substitution has been difficult because:

*stall feeding is required to protect stock from fly ingestion and because adequate grazing land is unavailable,

*family ability to find, cut and carry sufficient amounts of fodder is limited,

*calf mortality is high,

*surplus village milk spoils due to lack of processing and distribution facilities.

Forestry

The island has about 104,000 acres of forest over half of which is relatively low quality. The profit potential of the forests is low because of the species (pine) grown and the age of the forests: 60% of the stand is under 5 years of age and 90% is under 10 years. In addition, the price of Rs .20/cubic ft. (U.S. $0.04) charged to sawmillers for wood cut from government forests is well below international levels (U.S. $0.13).

MAURITIUS

RURAL DEVELOPMENT PROJECT

METHOD OF ECONOMIC EVALUATION

1. Economic evaluations were made of the three components of the Project producing marketable output, viz, afforestation, bench terracing, and fodder planting. The principal assumptions and methods used in these evaluations are as follows:

2. Unskilled labor employed by the DWC was shadow priced, for years 1 - 5, at Mau Rs 3.50 per day actually worked, and at the full rate thereafter.

3. Agricultural labor working on bench terraced land was valued at Mau Rs 2.00 per day for years 1 - 5, and at Mau Rs 3.00 per day thereafter.

4. Other labor was priced at market rates except that DWC gangmen and drivers were treated as unskilled labor and priced at half rates.

5. Foreign exchange costs and benefits were increased by 20 % reflecting the belief that the shadow exchange rate is 1.2 times the official rate.

6. Imported or exported goods were valued at their estimated c.i.f. or f.o.b. prices converted at the shadow exchange rate. The principal traded goods are forest products, agricultural inputs such as fertilizer and insecticides, part of transport costs, and food air supplied by the U.S. Sugar (some production of which will be foregone as a result of bench terracing) was valued at its marginal f.o.b. price.

7. Non-internationally traded goods were valued at current average domestic prices. Vegetables, fruit and milk were regarded as non-traded goods.

8. Detailed justification of the prices and procedures used is given below.

The Shadow Wage for Unskilled Labor

9. DWC Workers. Labor recruited by the DWC for the project will consist of men and youths registered as being unemployed and Relief Workers: i.e. men presently employed by the government on relief work. The appropriate shadow wage differs as between these two groups and hence they will be discussed separately.

10. Unemployed Men and Youths. The social opportunity cost of employing a previously unemployed man is sometimes taken to be zero, on the grounds that there is no reduction in marketed output elsewhere in the economy as a consequence of his being employed on the project. This approach has not been taken here, for the following reasons:

(a) Men registered as being unemployed are not necessarily - and not typically - completely idle and unproductive. They may be performing useful work in the household sector, such as gardening, cow-keeping, etc.; in self-employment, for example in agriculture or in petty trade; or as casual laborers in activities that do not endanger their status as being officially unemployed. It is also certain that some men on the unemployment register are not, in fact, unemployed, but have concealed their employment and registered as unemployed in the hope of securing a Government job. Hence, employment of a person registered as being unemployed will typically lead to some loss of output elsewhere in the economy, including the household sector.

(b) To say that the opportunity cost of employing an unemployed man is zero ignores the costs of working incurred by the man himself. These include not only any output or earnings foregone (mentioned above) but also - particularly in the case of manual work - additional food to meet higher energy requirements and wear and tear on clothes; the costs of transportation to and from work; and non-pecuniary costs (as perceived by the worker) of working on this particular job rather than doing whatever he was doing previously.

11. The approach that has been taken is to assume that the costs mentioned in (a) and (b) above are measured by the minimum wage at which workers would be willing to work on the project and that the actual wage paid in competitive and unregulated labor markets approximates to the marginal workers' minimum supply price. From scattered evidence it was concluded that in Mauritius, the market wage rate for casual, unskilled labor is probably about Mau Rs 4.00 per day.

12. However, a job with DWC differs in several ways from a typical casual job in the private sector, so it is likely that the minimum wage required to attract workers would differ also. Some relevant features of DWC employment are as follows:

(a) At the present time a DWC job is de facto a permanent job and may well continue to be so, despite the Mission's recommendation that DWC employment be regarded as strictly temporary employment.

(b) The costs of the worker's transportation between his home and the work site is borne by the DWC. However, the travel time is likely to be higher than average, since DWC worksites are located all over the island, including remote areas.

(c) Working conditions and employer-employee relations in the DWC are probably a good deal better than average.

(d) Opportunities for training in various skills exist in the DWC and these will be expanded if the project is implemented.

(e) The work effort required of DWC workers is said to be somewhat less than that typically expended by similar workers in the private sector. On the other hand, the nature of this work - road building, construction, forestry and agriculture, with little aid from machinery - is reasonably arduous.

13. Because of its several advantages, DWC work can reasonably be supposed to require less remuneration than casual work in the private sector. Some reduction in the figure of Mau Rs 4.00 would therefore seem appropriate. A reasonable estimate of the shadow wage for unemployed men is thought to be Mau Rs 3.50 per day.1/

14. This estimate of the shadow wage applies to unemployed adult males. A proportion of the project labor force will consist of youths. It is assumed that a youth's work effectiveness, expressed in adult equivalents, is equal to the youth's wage expressed on a proportion of the adult wage. The same assumption is made regarding the shadow wage applicable to youth workers.

15. Relief Workers. When a relief worker is transferred to the DWC, his output in relief work is lost to society. By all accounts this loss is small, since these men belong to an undisciplined work force that does very little work. The worker also incurs a cost, viz the disutility having to work harder than he has been accustomed. The fact that few Relief Workers have voluntarily transferred to the DWC indicates that they do perceive the additional effort as a cost. (Wages are nominally the same for DWC and Relief Workers, but in fact DWC wages are somewhat higher because of the inclusion of a food ration the market value of which is higher than its official valuation). However, society might quite reasonably take the view that any cost imposed on Relief Workers by virtue of requiring them to increase their work effort to customary standards should not be accounted as social loss and hence should be disregarded. On this view, the only cost involved in transferring a Relief Worker to the DWC is the consequent loss of output in relief work. One can only guess at the value of this output; it has been arbitrarily valued at Mau Rs 1.50 per day.

16. The Average Shadow Wage. It is expected that DWC labor will be recruited from the ranks of the unemployed and from the Relief Workers, in the proportion of 67% and 33% respectively. The appropriate shadow prices for these two categories of workers are estimated to be Mau Rs 3.50 and Mau Rs 1.50 per day. Hence, the average shadow wage for the project workforce as a whole is Mau Rs 2.85 per day.

1/ An independent estimate of the shadow wage of unskilled workers in Mauritius has been made by Scott. Scott's approach, employing the Little-Mirrlees framework of cost-benefit analysis, was rather different from that used by the Mission. It is interesting to note that his estimate is, nevertheless, very close to the Mission's: Scott's figure is Mau Rs 3.80 per day and is directly comparable with the Mission's estimate of Mau Rs 3.50 per day for unemployed men. (See M. FG. Scott, Estimates of Accounting Prices for Mauritius, Nuffield College, Oxford, 1972, mimeo.)

17. The cash wage (including food aid at its nominal value) for a DWC worker is Mau Rs 6.00 per day. When account is taken of paid public holidays and the fact that 3 hours of work are lost each Saturday with no loss of wages, the wage per day actually worked is Mau Rs 7.50. The shadow wage calculated above is approximately 38% of this figure. This shadow wage has been applied for the first five years of the project, but the full DWC wage has been used thereafter, since it is expected that the rate of unemployment will be substantially reduced by then.

18. Agricultural Labor. Additional labor will be required for the more intensive cultivation of land that bench terracing will allow. The shadow wage estimated for DWC workers is not applicable to this category of labor, for two reasons. First, a good deal of the agricultural work will be provided by self-employed smallholders and their families and it is observed universally that people are willing to work on their own account in agriculture for substantially less than the amounts they could earn in paid jobs. Second, much of the work will be performed by women, young people and old people for whom outside job opportunities are lacking or low-paying. It was therefore decided to shadow price this labor at Mau Rs 2.00 per day for the first five years of the project and at Mau Rs 3.00 thereafter.

19. The Shadow Rate of Foreign Exchange. The existence of trade taxes and subsidies means that the official exchange rate may not measure accurately the domestic value of a unit of foreign exchange, even though it equilibriates the supply and demand for foreign exchange. In such cases, a shadow rate of foreign exchange (or foreign exchange premium or discount) may be estimated by comparing the domestic prices with the border (i.e., c.i.f. or f.o.b.) prices of an appropriately weighted collection of traded goods.

20. In Mauritius, many imports are subject to import duties. In recent years, total import duties collected amount to 16% of the c.i.f. value of total imports. Hence, if an increment of foreign exchange were to be spent solely on additional imports, whose composition conformed to the present composition of imports taken as a whole, the domestic value of the additional imports would exceed their cost, c.i.f., by 16% and it would be appropriate to shadow price foreign exchange at 1.16 times the official rate of Mau Rs 5.40 to US$1.00.

21. Over 90% of Mauritius' exports consist of sugar and sugar products. The price received by producers for incremental output of sugar differs from its foreign exchange value (converted at the official rate) for two reasons. First, sugar is subject to an export tax of 6%. Second, sugar is sold in different markets at different prices, with the quantities sold on the higher-priced markets being limited by quotas set by international and bilateral agreements. This means that incremental production is sold on the residual world market at a relatively low price. However, the producer receives an average price based on sales in all markets for all of his production, including incremental production. As a result, the foreign exchange earned if an extra ton of sugar is produced is considerably less than the price that the producer receives for it. This "subsidy" 1/ element in sugar pricing greatly outweighs the tax element so that the domestic producer price of sugar exceeds its border price.

1/ It is a subsidy paid by sugar producers to themselves: returns from intramarginal output sold on higher price markets are used to subsidize marginal output sold on the residual world market.

22. Using 1970-71 data on prices received in the different markets and making the same assumption about the world free market price as is made in the Mauritius 4-year Development Plan, it is calculated that the ratio, domestic producer price/marginal export price is 609/435, or 1.4[1/]. On the other hand, the consumer price of sugar in Mauritius is less than the marginal export price.

23. Adjustments required as a result of a shortage or superfluity of foreign exchange can fall on exports, or imports, or both. It seems reasonable to suppose that in Mauritius the demand for sugar is very inelastic. The supply is also probably rather inelastic, although production can be expanded at the margin at the expense of other crops and by increased use of fertilizer. Hence, the burden of adjustment is likely to fall mainly on imports. Therefore, a shadow price for foreign exchange closer to the domestic/border price ration for imports (1.16) than to the ratio for exports (1.4) is appropriate. The chosen rate is 120%. A rate higher than 116% was deemed to be appropriate not only because it was thought that some weight should be given to the higher domestic/border price ratio for sugar exports, but also because it is likely that the more elastic imports (on which the burden of adjustment would mainly fall) carry import duties exceeding the average rate of 16%. (For example, about one-third of total imports consist of food, including the staples rice and wheat flour which pay zero or low duties and for which the demand is very inelastic.)

1/ According to the Mauritius 4-Year Development Plan, "For planning purposes the marginal price of sugar to Mauritius - that at which any additional quantities produced can be sold on world markets - is taken to be £ 32.50 per long ton f.o.b. (Mau Rs 435 per metric ton). This is 10% above the national "floor price" of the International Sugar Agreement."

The average price received for Mauritius sugar is assumed to be Mau Rs 647 per ton. This figure is based on 1970-71 prices and percentages sold in different markets, as follows: Commonwealth Sugar Agreement, Mau Rs 766 (63.1%); USA, Mau Rs 833 (2.7%); local, Mau Rs 299 (5.6%); and world free market, Mau Rs 435 (28.6%). The average price received by producers, after paying the 6% export tax, is Mau Rs 609. Hence, the ratio domestic producer price/marginal export price is 609/435, or 1.4. (Prices quoted in this paragraph are taken from Scott, op. cit.).

It is realized that world sugar prices are now higher than stated above and that the future course of prices is uncertain. For present purposes, it is not the absolute level of prices that is relevant, but the relationship between the free market price and the average producer price in Mauritius. The argument in the text assumes that the ratio of 1:1.4 will be maintained in the future, but does not depend critically on this assumption, since the estimate of the shadow exchange rate is based preponderantly upon the domestic/border price ratio for imports.

Valuation of Major Inputs and Outputs

24. Transportation of workers to the forests and other DWC worksites is a fairly substantial cost. It was assumed that of every Mau Rs 100 spent on transport, Mau Rs 20 represents the drivers' wages and this portion was shadow priced at Mau Rs 10. The remaining Mau Rs 80, representing the costs of gasoline, oil, spares, vehicle depreciation, etc. was taken, on the basis of input-output data1/, to be composed of taxes (Mau Rs 18), distributive margins (Mau Rs 20) and foreign exchange (Mau Rs 42). Deducting taxes and and shadow pricing the foreign exchange cost reduces the Mau Rs 80 to Mau Rs 70. Hence, the economic cost of transportation was taken to be 0.8 of the money cost.

25. Fertilizer and Insecticides. Import duties on these items are negligible. Their cost was assumed to be composed of 70% foreign exchange and 30% distribution costs. Revaluing the foreign exchange component at the shadow exchange rate raises their cost by 14%.

26. Other Imported Inputs. Market prices were adjusted upwards by 10%, a rough estimate of the net effect of revaluing the foreign exchange component of costs and subtracting taxes.

27. Sugar output is foregone on bench terraced land. Starting from, say, Mau Rs 100 received by the planter for sugar, the following adjustments are required to arrive at the sugar's social value:

	Mau Rs
(a) Add the milling charge (32% of the value of the sugar produced) to give the gross (unadjusted) value of the sugar produced.......	147
(b) Revalue (a) at the marginal price of sugar (70% of the average price; see paras 22 and 23 above)	103
(c) Add to (b) the shadow exchange premium of 20%	124
(d) Deduct the marginal cost of milling, assumed to be Mau Rs 35 (or 75% of the milling charge of Mau Rs 47)	89

Rounding, the shadow price of planter's sugar was taken to be 90% of the price received.

1/ Estimated by Scott, op. cit. The cost composition of spare parts and gasoline, combined in the proportions 0.75 and 0.25 respectively, was taken to be representative of these items as a whole.

28. **Land.** Land to be planted to forest is presently unproductive and hence no opportunity cost has been imputed. The annual cost of bench terraced land has been assessed as the value of pre-project output less pre-project costs. Land to be used for fodder production is mostly covered with scrub or aloes and hence in its present use yields very limited quantities of rough fodder. Allowance has been made for the loss of this fodder production by reducing the net benefits from fodder planting by 10%.

29. Forest Products. Wood price for pines at stump at time of clear felling is assumed to be Mau Rs 2.60 per cu ft. (US$17.00 per m^3) measured over bark. This price is based on an international price for timber c.i.f. Mauritius of US$20.00 minus costs of harvesting and transport of US$3.00. The price at stump for pines at thinning and eucalyptus at clear felling is taken to be Mau Rs 1.00 and 0.75 per cu ft respectively. These products were assumed to substitute for imports and hence the above prices were increased by 20% to reflect the shadow foreign exchange premium.

30. Agricultural Produce. Additional output of agricultural produce, viz vegetables, fruit, maize and milk, will substitute, at least in part, for imports of these products in fresh and processed form. These imports generally attract import duties of 10%; deducting these and shadow pricing the foreign exchange saved at a premium of 20% gives a net upward adjustment of 10% to the domestic prices of agricultural produce. However, it is not certain that extra production of these goods will be entirely reflected in reduced imports. For one thing, the goods produced, being marketed mainly as fresh produce, are not perfect substitutes for processed imported goods. For another, to the extent that production is concentrated in times of seasonal abundance, the effect will be to lower domestic prices and allow increased consumption, rather than to displace imports. For these reasons, and also from a desire to err on the side of conservatism in estimating benefits, agricultural products were treated as non-traded goods and valued at their domestic farm-gate prices.

Efficiency and Distributional Aspects of Wage Payments to Workers

31. Employment by the DWC of unemployed workers will bring about a substantial increase in the incomes of the latter. This transfer of purchasing power from the rest of society to previously unemployed workers can be considered from the viewpoint of distributional equity and also for any effects it might have on the efficiency of resource use. Two possible "efficiency" implications are discussed first.

32. It is frequently asserted: (a) that wage payments to workers result in more consumption and less savings or investment, than would result if the funds were used for other purposes; and (b) that this involves a social cost on the grounds that savings are socially more valuable than consumption. While it is not known with any confidence whether these arguments apply to the case of Mauritius and, if so, to what extent, the judgment was made that any such effect is likely to be small and hence it was disregarded.

19. The rates of return at shadow prices are considerably higher than at market prices, though the difference is less marked for fodder planting than for the other two investments. Most of the differences ~~is~~ are attributable to the lower cost of labor when it is shadow priced.

O. P. Research

Mr. E. Stern

December 20, 1973

Timothy King

Population Growth and Rural Poverty

Attached is a copy of a letter from the Population Council concerning the research project, Population Growth and Rural Poverty. As you can see, it meets the condition laid down by the Research Committee that the Population Council participate and endorse the methodology. Though the Population Council has been more generous than the Bank, the full costs are still not met. There is also some difference between the budget submitted to us and that submitted to the Population Council. This is principally because the amounts for the support of the graduate students have increased substantially. This may reflect in part the university fees but I gather, mostly, the rapidly rising cost of living in England. Scarlett Epstein said that the original amount was based on the normal grant given by the British Government to British student, which is meant to keep English students for only 30 weeks per year. Scarlett Epstein has also suggested she would need some additional travel this year. However, the pound is still floating downwards and the amount that the Council estimates will be needed, in dollar terms is not very different from that in my proposal: $232,372 as distinct from $222,500 in the proposal I put to the Research Committee. The letter from Paul Demeny asks whether the Bank would be prepared to put up the other half, since this would reduce the number of sponsors. This would no doubt simplify things for Scarlett Epstein as well as for ourselves, and leave her free to work on the project. Otherwise I interpret the decision of the Research Committee to be a willingness to put up $5,000 for Bank travel plus somewhere from $57,000 to $79 000 for FY, 75 to 77. This will leave Prof. Epstein with the problem of raising a further $40,000 to $60,000 more. I myself would like to see the Bank commit itself to the same degree as the Population Council. Even more important however is to get a firm ruling on what precisely we will put up so that Professor Epstein knows exactly where she is.

TK

TKing:jln

cc: Mr. Gulhati/Mrs. Hughes
Mr. D. C. Rao

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

D.P. Research
Central Files

OFFICE MEMORANDUM

TO: Mrs. Helen Hughes, ECDDR

DATE: December 20, 1973.

FROM: Anna M. Sant'Anna, ECDRB, and Dipak Mazumdar, ECDPH

SUBJECT: Back-to-Office and full Report: BRAZIL - Supervision Mission RPØ 290

A. Introduction

1. In accordance with Terms of Reference dated November 26, 1973, from T. King and D.H.Keare, the mission, composed of Mr. Dipak Mazumdar and Ms. Anna M.Sant'Anna, visited Brazil for 14 days to supervise CEDEPLAR's work on RPØ 290 ("The labor market in a rapidly growing urban area"). The status of the project and the conclusions reached by the mission are presented below.

B. Summary and Conclusions

2. CEDEPLAR is following the Terms of Reference for the Study satisfactorily in its descriptive aspects. However, some of the analytical exercises programmed under the Service Agreement seem beyond the capacity of CEDEPLAR staff to accomplish without some substantial input from Bank staff.

3. Without such input, it can be predicted on the basis of the observations made during the mission, that the CEDEPLAR study is likely to suffer from analytical shortcomings in the study of the family economy (see Appendix A to the Agreement, para. 1, page 1), and of underemployment (ibid., para. 3, page 4).

4. Thus, for CEDEPLAR to fulfil the terms of the Agreement it signed with the Bank, additional help from the Bank in the form of staff time and financial support appears necessary. The mission believes such help to be justified given the significant improvements in the research output it can entail. It should also be stressed that the topics to be covered by Bank staff form part of the comparative inter-country study being carried through under RPØ 245. The approval of the Research Committee for RPØ 290 was partly influenced by this consideration.

C. Recommended Bank Action

5. The mission recommends that:

(a) CEDEPLAR be provided with additional help to successfully complete the work planned under the Service Agreement with the Bank;

(b) Accordingly, the mission feels that Bank staff should undertake the analysis of the household economy with some collaboration from Prof. Brito of CEDEPLAR;

(c) Prof. Brito should be brought to Washington to review with Bank staff the preliminary tabulations of the household economy chapter, by late February 1974. The costs of this trip shall be jointly borne by CEDEPLAR and the Bank;

(d) Commercial computer and programmer's time should be provided to CEDEPLAR, upto a maximum of $1,780, primarily to assure the processing of the household economy data on schedule;

(e) After a decision is reached on the above recommendations, the Bank should inform CEDEPLAR by cable of the availability or not of additional funds and send a letter to CEDEPLAR's director, Prof. José Birchal Wanderley, making specific arrangements for this collaborative chapter within the framework of the Service Agreement.

D. Present Status of RPØ 290

6. At present, the four (4) research assistants engaged in the study have completed their report outlines and are beginning the analysis. Their work includes a short monograph on each of the following topics: (1) labor absorption in the construction industry; (2) female labor force in the Belo Horizonte Metropolitan Area; (3) labor absorption in Commerce; and (4) labor absorption in Transportation and Communications. Some of these reports are planned better than others but all are in their initial stages. It appears to the mission that the supervision by CEDEPLAR staff of the research assistants' work is somewhat inadequate. One of the reasons for the observed inadequacy is Prof. Brito's involvement in report writing for PLAMBEL. The mission expects this situation to improve following completion of PLAMBEL report by the end of this calendar year.

7. Two additional research assistants, not financed by the Bank, are working on the determinants of fertility and on the effects of migration on fertility, respectively.

8. Prof. Merrick is currently completing a paper on the formal and informal sectors of the labor market, attempting to explain the determinants of individual earnings of workers. For this he is working mainly with the tapes containing individual records. In a previous paper, he has examined the relative importance of migrant status on individual earnings and position of workers in the labor force. Some selected demographic variables have also been included in these analyses. Prof. Merrick plans to include both papers in the final research report.

9. Prof. Brito, as mentioned above, has spent most of his time writing the PLAMBEL report on occupational structure and income distribution in the Belo Horizonte Metropolitan Area. He has manifested to the mission the desire to analyse the household economy, starting on January 1974, in collaboration with Bank staff.

10. Without further collaboration from Bank staff and additional financial support, the final research-outcome will probably be as follows:

(1) General characteristics of the labor force - demographic, occupational, and sectoral aspects (Merrick & Brito);

(2) Determinants of individual earnings, with special reference to the formal and the informal sectors of the labor market (Merrick);

(3) Labor absorption in the construction industry (Medeiros);

(4) Labor absorption in commerce (Silva);

(5) Labor absorption in transportation and communications (Machado);

(6) Female labor force (Domas);

(7) Determinants of fertility (Camargo);

(8) Effects of migration on fertility (Coelho).

E. Factors affecting CEDEPLAR's performance

11. Staff and data processing problems are inhibiting CEDEPLAR to proceed with the analytical work contemplated in the Service Agreement. The mission feels that the analytical limitations of CEDEPLAR counterparts can be overcome by an increased input of Bank staff time into the project, meaning approximately three-weeks of Mr. Mazumdar and Ms. Sant'Anna's time starting late March 1974. If CEDEPLAR is able to process the data properly, on time, this input should be enough.

12. On the processing of the data, CEDEPLAR has agreed with the Bank to use the University's IBM 360/40 computer and its own programmer (at no cost to the project) thoughout the research. When making this commitment, CEDEPLAR did not anticipate that the computer would be busy during three months (from January to April 1974), i.e. that very little time would be available for research during that period. Under these circumstances, the analytical work to be done before March requires the use of a commercial computer if the schedule is to be maintained. CEDEPLAR expressed to the mission the hope that the Bank would be able to assign funds to pay for commercial computer and programmer's time. The tape, tables, and regressions needed for the analysis of the of the household economy would not be done on schedule, unless this measure is taken.

F. The Budget

13. The total approved budget for RPØ 290 is $28,750 of

which $20,500 has been allocated to CEDEPLAR and $8,250 to supervision missions by Bank staff. At present, we have disbursed about $5,560 for supervision missions (including Mr. D.H.Keare's trip to Brazil in July 1973) and can expect CEDEPLAR to fully utilize its budget. The project thus remains with $2,690 balance as yet to be allocated.

14. The mission proposes that CEDEPLAR be granted $1,780 for computation expenses out of Departmental funds. The $2,690 project balance should be used to partly cover the third and last supervision mission by Mr. Mazumdar and Ms. Sant'Anna. The remaining travel expenses by Bank staff (estimated at $1,810) and one round-trip economy ticket for Mr. Brito ($910) should be paid out of Divisional funds, shared between ECDRB and ECDPH.

15. An early decision on the issues discussed in this report is needed for proceeding with the project on schedule.

Attachment:

Cleared with and cc: Messrs. T.King, Chief, ECDEPH, and
D.H.Keare, Chief, ECDRB

cc: Messrs. D. Avramovic,
Echeverria,
Greene,
Skillings,
Simmons,
English,
Clark.

Central Files.

DMazumdar/ASant'Anna:bnd

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
1818 H Street N.W., Washington, D.C. 20433, U.S.A.
[illegible] INTBAFRAD

December 26, 1973.

Prof. Jose Birchal Wanderley
Director
CEDEPLAR - Centro de Desenvolvimenta e
Planejamento Regional
Rua Curitiba 832, 9 andar
Belo Horizonte 30000
Minas Gerais, Brazil.

Dear Prof. Wanderley:

We thank you for your kind reception to the Bank mission in Belo Horizonte, and are pleased to inform you that an agreement has been reached within the Bank to further support CEDEPLAR's efforts to complete the Labor Force Study (RPØ 290).

CEDEPLAR's proposition to ensure the close collaboration of Prof. Brito in the analysis of the household economy is welcomed by the Bank and we confirm the invitation to Prof. Brito to come to Washington in late February 1974. In that occasion, we expect Prof. Brito to have all the preliminary tabulations for the analysis of the household economy and to be able to discuss with us the outline of the chapter. Prof. Brito's air ticket will be sent in due course and we expect CEDEPLAR to cover all his other travel expenses.

The Bank is also agreeable to reimburse CEDEPLAR of extra computation expenses (i.e. commercial computer and programmer's time) upto $1,780 which we estimate is sufficient to cover the data processing work for the household economy chapter.

We hope this arrangement would overcome the last obstacle to the full and effective use of the data by Bank staff under our collaborative agreement. We feel that his collaborative effort on the household economy chapter provides the opportunity to enlarge the audience of the study, both in Brazil and outside.

Best regards,

Sincerely yours,

Douglas H. Keare
Chief
Urban and Regional Economics Division
Development Economics Department

[illegible]
[illegible]
D. Mazumdar
Ms. A. Sant'Anna
Central Files.

Sant'Anna:bmd

Form No. 27
(6-69)

INTERNATIONAL DEVELOPMENT ASSOCIATION	INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO: PROF. JOSE BIRCHAL WANDERLEY
CEDEPLAR
RUA CURITIBA 832
BELO HORIZONTE 30000
MINAS GERAIS

DATE: December 26, 1973

CLASS OF SERVICE: LT

COUNTRY: BRAZIL

TEXT:
Cable No.:

RE RPØ 290 BANK APPROVES REIMBURSEMENT OF COMPUTATION EXPENSES UPTO $1,780 AND MR. BRITO'S TRAVEL stop WE WILL SEND HIS TICKET TO WASHINGTON SHORTLY REGARDS

D.H.KEARE

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME D.H.KEARE

DEPT.

SIGNATURE
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

CLEARANCES AND COPY DISTRIBUTION:

cc: Messrs. T.King
D.Hagerdorn

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form) ... checked for Dispatch:

O.P. Research

December 18, 1973

Professor Scott Pearson
Food Research Institute
Stanford University
Stanford, California 94305

Dear Scott:

Greetings.

We are getting to the point of having to discuss the matter of finalizing your methodological annex to the comparative advantage study on cocoa. In the following, I wish to offer my comments on your 7/10/73 draft, further to those I made 8/15/73.

First, I confirm that the DRC measure has been selected as the main analytical tool for the study. Data availability being one of our major constraints, it appears that pragmatically speaking DRC involves the least amount of statistical data since it is used to form a single ratio with the shadow exchange rate for inter-country comparisons. I do not think we have sufficient statistical data to make intra-country comparisons among alternative crops.

With DRC in mind, it would be most desirable if the section on it in your draft can be expanded. Some of my colleagues have commented that they would like to see more detailed explanation of some of the statements you made which are supported by references to original sources. I suppose to do this would only involve reviewing for the reader some of the original methodological steps followed by Bruno and others.

It would also be very useful for the reader to be given some intuitive explanation of the meaning of DRC on its own as distinct from NSP. Similarly, at least heuristic definitions of comparative advantage and of relative comparative advantage should be given.

Apart from the above substantive points, I am sure you will agree that in general the draft needs "cleaning up," especially in places which were written up hurriedly. For example, in your illustrations, an explanation should be given for the substitution of w_s for v_s in connection with the kind of distortions that may be expected from the substitution.

Let me also point out some of the apparent errors and omissions that I have spotted in the draft. A distinction between the use of farm-gate data and country-gate data may be made. In equation 5a, it looks to me that the term $k_{jt} \cdot W_t \cdot v_{mt}$ should be preceded by a positive instead of a negative sign. In your multi-period illustration, it would be helpful if the symbols of k_{jt}, W_t and v_{mt} are clearly marked for identification of their specific values. I believe in the same illustration, a line C.2.c is missing. These are only some examples.

Looking forward to hearing from you,

Yours sincerely,

Patrick Yeung

Patrick Yeung
Economist
Commodities and Export Projections Division
Economic Analysis and Projections Department

Clearance and cc: Mr. S. Singh SW
cc: Mr. W. Tims

PYeung:mb
PY

OP - RESEARCH

Mr. A. Karaosmanoglu
(through Mr. Dubey)
Martin Schrenk M.S.

December 18, 1973

RESEARCH PROJECT: Capacity Utilization in Industry

1. Your request for attending the seminar on the research project was passed on to me through Mr. Dubey. I talked to Mr. Fred Moore (Industrial Projects) who is monitoring the project and was told the following:

2. The seminar is postponed to some time in January. No outline or formal research program or proposal for the project does exist: research budget is \$ 50,000. The project is executed by Messrs. Rosenstein-Rodan and Scitovsky. In half a dozen Latin-American Countries enterprises were interviewed about the reasons causing them to change (or not to change) from one-shift to two-shift operation; the interviews were made by local counterparts. The interview phase is concluded, the results are being formulated for presentation to the Bank, the report is due some time in spring.

3. This project is unrelated to a project with a similar heading, focussing on Malaysia (and some other countries; apparently including Yugoslavia) which is executed by the Development Economics Department (budget: \$ 100,000?).

4. I would like to volunteer for attending the seminar in January if nobody else is interested.

MS/gs