Folder Title: Research Projects - General 1975 / 1977 Correspondence - Volume 3

Folder ID: 1064732

Date: 9/8/1975 – 4/29/1976

ISAD(G) Reference Code: WB IBRD/IDA DEC-01-02

Series: Correspondence and Files Created for Research Projects in Support of Operations (Operations Policy Files)

Sub-Fonds: Records of the Office of the Vice President, Development Policy (VPD) and the Development Policy Staff

Fonds: Records of the Office of the Chief Economist

Digitized: 8/16/2018

RESEARCH PROJECTS - General
1975 / 77
Vol III

FORM NO. 635
(7–74)

This file is closed as of 30. APRIL 1976

For further correspondence, please see VOL. IV.

RECORDS MANAGEMENT SECTION

Research - General

Revised draft
April 1976
Ardy Stoutjesdijk

# An Agenda for Urban Research

## 1. Introduction.

The Draft Action Program and Interim Report of the Urban Poverty Task Group (hereafter, The Action Program) included among its recommendations the development of an urban research program, for submission to the Bank's Research Committee in May or June, 1976. This paper presents an orientation for such a program, covering the full range of research on urban problems, but stressing within this field the matters affecting poverty. The paper is designed to serve as a background against which individual and more detailed research proposals can be drawn up, and evaluated in terms of their relative importance.*/

The organization of the paper is as follows. After a brief introductory statement regarding the urban poverty problem, an orientation for a Bank-sponsored urban research program is presented. Against this background, a research program is drawn up consisting of two main components, one that is directly related to and supportive of The Action Program, and one that addresses itself to the question of alternative strategies of poverty alleviation. In a final section, a research strategy is suggested that represents a balanced portfolio of components of the research program. No attempt has been made in this paper to suggest an assignment of Departmental responsibilities for the execution of the research program.

---

*/ This paper has benefited from discussions with colleagues from CPS and DPS Departments. Moreover, the documents produced by the Urban Poverty Task Force have been used as background material.

2. Urban poverty and the Bank's potential role.

Most of the developing countries have experienced unprecedented rates of urban population growth over the past few decades, both due to migration from the rural areas and to natural growth of the urban population. Generally, the growth rate of the urban labor force has been higher than the growth rate of productive job opportunities in the urban areas, and open unemployment and widespread low productivity employment prevail. As a result, a proportion of the urban population, widely varying by city, lives in absolute poverty, as exhibited by such characteristics as malnutrition, low life expectancy, inadequate housing conditions, and poor educational standards.

Most LDC cities have not been able to generate the resources that are required to provide a minimum standard of urban infrastructure and basic public services to the entire urban population. Available evidence suggests that it is primarily the urban poor that lack adequate access to such basic services. The latter further depresses real income levels of the poor; moreover, it quite possibly limits the scope for improving their income-earning potential by its negative effects on productivity (e.g. poor health, poor educational background) as well as on mobility (poor public transport).

Against this background, the Bank has decided to initiate a lending program that is specifically designed to contribute to the alleviation of the urban poverty problem in LDCs, thus complementing action previously initiated to achieve similar objectives in the rural areas. A set of recommendations for Bank action in the immediate future in this regard is contained in The Action Program. This entails shifts in the lending program,

2. Urban poverty and the Bank's potential role.

Most of the developing countries have experienced unprecedented rates of urban population growth over the past few decades, both due to migration from the rural areas and to natural growth of the urban population. Generally, the growth rate of the urban labor force has been higher than the growth rate of productive job opportunities in the urban areas, and open unemployment and widespread low productivity employment prevail. As a result, a proportion of the urban population, widely varying by city, lives in absolute poverty, as exhibited by such characteristics as malnutrition, low life expectancy, inadequate housing conditions, and poor educational standards.

Most LDC cities have not been able to generate the resources that are required to provide a minimum standard of urban infrastructure and basic public services to the entire urban population. Available evidence suggests that it is primarily the urban poor that lack adequate access to such basic services. The latter further depresses real income levels of the poor; moreover, it quite possibly limits the scope for improving their income-earning potential by its negative effects on productivity (e.g. poor health, poor educational background) as well as on mobility (poor public transport).

Against this background, the Bank has decided to initiate a lending program that is specifically designed to contribute to the alleviation of the urban poverty problem in LDCs, thus complementing action previously initiated to achieve similar objectives in the rural areas. A set of recommendations for Bank action in the immediate future in this regard is contained in The Action Program. This entails shifts in the lending program,

with lesser emphasis being placed on transportation and power projects, while increasing the share of total lending to education and urban projects, as well as to DFC operations. Moreover, within sectors, greater emphasis is proposed to be placed on projects and project design that directly or indirectly benefit the urban poor. A summary of the main points of The Action Program is given in an annex to this paper.

3. An orientation for an urban poverty research program.

The Action Program has been drawn up in the knowledge that it is not entirely clear at this stage which types of projects and policies are the most appropriate in any given set of circumstances, and which priorities should be attached to certain forms of action. It is quite clear, however, that the objective of alleviating urban poverty in LDCs has become one of the explicit targets of Bank Group policy, and that changes of emphasis in the lending program should result. The Action Program outlines the general direction of these changes which have been accepted by the Bank's management.

Under these circumstances, a Bank-sponsored research program must serve a dual purpose. *First*, it must be supportive of the types of action that have been identified in The Action Program as appropriate elements of an urban development strategy for the Bank. *Second*, it must attempt, through improvements in our understanding of the nature and scope of urban poverty, to improve upon the formulation of policies and programs to alleviate urban poverty.

The *first* component of the program includes research on issues that emerge as elements of The Action Program are being implemented.

This involves analytical work which is closely related to the design, appraisal and implementation of specific elements of the urban lending program; as the need for such research will be generated in the course of the Bank's operations, it is not possible to anticipate the precise contents of this part of the research program. In addition to the implementation research, The Action Program itself requires research both with respect to the potential of the urban economy to generate productive and remunerative employment opportunities, and with respect to the need to develop the analytical tools that can assist in the design and formulation of coherent programs of urban infrastructure and public services which benefit the urban poor.

The *second* component of the research program, which explicitly addresses the strategic issues in relation to urban poverty alleviation, should initially place emphasis on improving our empirical knowledge of urban poverty and its contributing causes. This will provide the basis for research which facilitates the introduction of the urban and spatial dimension into ongoing sector and macro-economic work thus permitting the formulation of integrated antipoverty strategies (urban as well as rural). This part of the research effort should clearly be closely related to ongoing research on development, most notably to research on income distribution and employment, improved country models, and rural development.

It should be noted that it is neither possible nor desirable to isolate the various components of the research program, as there are obvious and strong inter-relationships. As elements of the action program are implemented, more will become known about the effectiveness of specific projects and policies, and this knowledge must influence research on the more strategic questions. Similarly, research on antipoverty strategies

will influence action programs, and it is quite conceivable that priorities will have to be modified as the experience with antipoverty programs grows. Consequently, the research program drawn up below uses a categorization of research in the urban area only as an organizing device with respect to the main topics that should receive some priority; a later section on research strategy suggests the proper mix among them.

Research focusing on the design of alternative antipoverty strategies will underline the need to think in terms of typologies of urban center. Quite clearly, what may be appropriate for Sao Paulo is not necessarily appropriate, or even feasible, in Dacca or Calcutta. Even within countries, characteristics among cities may be sufficiently different to dictate different forms of action. As the need for typologies is most apparent while discussing alternative antipoverty strategies, we shall return to this issue while discussing strategic research.

4. Action Program - related research.

The Action Program necessitates research of two kinds. First, the implementation of the lending program is likely to generate the need for a substantial amount of operational research. Second, several components of The Action Program itself require further research.

a. Implementation research. With regard to this category of research, it is difficult to anticipate the precise nature of the research questions that may come up, but they are likely to relate to problems of priority setting for Bank lending within and among sectors of

the urban economy, and to the design, appraisal and implementation of specific projects, programs and policies. Typically such analytic work should be financed out of operational budgets associated with the projects concerned; however, in terms of staff input, it competes to some extent with research needs of a less directly operational character.

An important aspect of implementation is evaluation research, i.e. research that focuses on the experience in countries around the world with specific projects and policies, in this connection those designed to alleviate poverty. For example, what has been the experience with low-cost housing schemes? Self-help projects? Low-cost public urban transportation? Food subsidy policies? Both within the Bank, as well as in other organizations (such as I.L.O.) a substantial amount of accumulated expertise is available but not readily accessible. A research effort designed to systematize this information, and an analysis of the conditions under which such projects and policies can be successfully implemented may be of considerable benefit in their future design and formulation.

b. Research on components of The Action Program. As stated above, The Action Program was drawn up against a background of knowledge regarding the urban poverty problem, and the functioning of the urban economy, which is far from perfect. Even though the strategy in its broad outlines has been accepted as a basis for action in the near term, therefore, a substantial research effort is required to elaborate upon the characteristics of the major components of the strategy, and to clarify the forms which their implementation may take.*/

*/ This research may result in modifications of the strategy, and consequently, ties in closely with research focusing explicitly on alternative anti-poverty strategies (see next section).

The core of The Action Program is the objective of increasing the efficiency of the urban environment in LDCs in meeting certain welfare objectives. This involves improving the access of the urban poor to basic urban services and infrastructure and enhancing the ability of the urban economy in providing productive and remunerative employment opportunities.

*The efficiency of urban systems.*

With respect to the former objective, procedures need to be established for the identification and formulation of urban project packages. As in the overall economic framework, interdependencies among urban projects and policies are of importance and should be taken into account in the design and appraisal of action programs if a full measure is to be obtained of costs and benefits. The problem is that, in general, interdependencies have proved to be extremely difficult to capture, and it is only through the formulation of large-scale mathematical planning systems that some insight into their importance and effects has been obtained. Research focusing on *urban* interdependencies, as a basis for project and program design, will therefore require a substantial effort that will have to be organized carefully. The latter must be considered outside the scope of this paper, and it is consequently proposed that the formulation of the urban planning methodology itself is included among the research projects to be undertaken. The excellent review of urban planning models by Rakesh Mohan might be taken as a starting point for this research effort.*/

*/ Rakesh Mohan, "Toward Modelling Poor Cities: A Review of Urban Economic and Planning Models", November, 1975 (mimeo).

Once it has been established that the problem of urban interdependencies is researchable at the level of disaggregation considered necessary for urban project design, the planning methodology can be tested within a specific urban environment. This will involve a major effort in terms of data collection, analysis and data processing, as well as organization, with both research and operational components. It will necessitate focusing on such diverse but inter-related issues as urban land use policies and management, the supply characteristics of urban services, including questions of appropriate technology and standards, delivery systems and pricing, the effective demand for urban services in terms of the ability and willingness to pay, particularly on the part of the target groups, and a range of issues associated with urban public finance and taxation. The sheer magnitude of this research task, in the light of the limited research resources available, would make it the major new research effort to be undertaken as a result of the recent emphasis on the urban poor.

*Urban employment.*

Research focusing on an increased ability of the urban economy in providing productive and remunerative employment opportunities may focus on the conditions under which urban small scale producers operate, again following the major thrust of The Action Program in this regard.

Research in the area of small scale production may take the form of attempts to identify the constraints on productivity increases in small scale establishments in specific situations, as a basis for Bank action. Such constraints may include lack of adequate access to credit facilities,

resulting in interest rate discrimination in comparison to large scale establishments, economies of scale in production, insufficient training of both workers and managers, lack of access to adequate sites and services, problems in procuring raw materials, as well as marketing and distribution problems for final output. In any given situation, the combination of factors responsible for low productivity may vary, and situation-specific measures will therefore be called for.

In addition to the operational research effort in the area of small scale production, a more general research effort is necessary. The latter may address itself to the following issues:

(i) An analysis of the role that small scale establishments have played in a number of selected countries in the development process, both in terms of employment and value-added generation, and in terms of technology choice and the efficiency of resource use in comparison to larger-scale establishments.

(ii) The identification of incentive systems that may improve the performance of small scale establishments;particular emphasis should be placed here on price distortions within the economy that constitute biases against small scale production.

(iii) Methodological research that may provide the analytical tools that assist in the identification of lines of production that are particularly suited for small-scale production, and that can be used to formulate attractive projects and programs.

In this connection, The Action Program's recommendation that Bank lending to the industrial sector should be directed to a greater extent toward branches of industry that provide greater scope for direct employment generation raises a number of questions that are researchable. First, which are these branches of industry, and why is it that Bank lending to these industrial activities needs special encouragement? Second, to what extent are the activities in this category directly competitive with small scale establishments? If so, which criteria can be formulated to appraise individual projects in this category?

The research questions mentioned above can be related to another issue brought up in The Action Program, i.e. the justification of investments in large-scale, capital intensive productive sector activities due to their substantial indirect employment effects. The first issue is whether the indirect employment effects ought to be a criterion for continued support for lending to these sectors. Second, what are the indirect employment effects, and how should these be measured? The question of indirect effects of projects has perhaps received inadequate attention in the project analysis literature, and deserves some elaboration.

5. Strategic research.

So far, the research suggestions have been drawn up closely following the forms of action proposed in The Action Program, thus taking the implied anti-poverty strategy components as given. The underlying rationale is that there is little that any research effort can do to change the strategy in the short run. However, it must be recognized that the present

strategy is very much the reflection of the current state of knowledge, which is very limited. A proportion of research resources should therefore be allocated to research that focuses explicitly on alternative or modified anti-poverty strategies.

The first question that will need to be addressed is that the most appropriate mix of projects and policies will vary depending on the situation, and that consequently some typology of urban centers and the environment in which they are located will be necessary. At this stage it is not possible to define the characteristics of the typology that is required to make generalizations with respect to the most appropriate anti-poverty strategy in differing circumstances; as the research on urban poverty proceeds, and as components of The Action Program are being implemented, such a typology will logically emerge. For the time being, to focus ideas in this respect, the typology proposed in one of the Urban Task Force background papers could be adopted.*/

This typology is based on countries rather than cities, and distinguishes among four types of countries, referred to as Type I to IV countries.

> Type I countries. Here, the urbanization process is well underway. More than 50 percent of the population is urban, and urban as well as rural incomes are relatively high (among LDCs). Before the end of the century the urbanization process can be expected to be completed, with most of the population living in the cities. Type I

*/ The Task Ahead for the Cities of the Developing Countries, World Bank Staff Working Paper No. 209, July 1975.

countries are primarily located in Latin America.

Type II countries. Type II countries are less well off than Type I countries, and both urban and rural incomes are lower. Urbanization is of more recent date, but due to pressures on the land, proceeding rapidly. Urban poverty is more substantial. The countries have a fairly well developed industrial base. Countries in this category include Algeria, Korea, Malaysia.

Type III countries are mainly located in Africa. Cities are still relatively small, but growing extremely rapidly. Agricultural land is usually plentiful, and the economy is heavily dependent on agricultural production. In these countries, rural development programs may be considered as part of an urban strategy to slow down migration to the cities.

Type IV countries. These countries are extremely poor. Most of the population is rural. Population growth rates are high. Rural-urban migration is expected to continue for the foreseeable future. Both urban and rural incomes are low, and the number of absolute poor is very high in relation to total population. The Type IV countries are mainly located in Asia (e.g. India, Indonesia).

Crude as the typology outlined above may be, it draws attention to a number of aspects of the urban poverty problem that need to be taken

into account while designing action toward its alleviation, and, therefore, in drawing up strategies. Among these are:

- in some countries, action programs that emphasize productive employment generation in urban areas deserve priority over those that give emphasis to the provision of urban infrastructure;
- in others, urban poverty may be alleviated by effective income distribution policies; the provision of basic urban services to the poor may be an efficient instrument for real income transfers;
- in some countries, urban poverty may be alleviated, or prevented, by rural development programs that slow down migration to the cities;
- in other countries, poverty (rural and urban) is so widespread, and resources available for its alleviation are so limited, that substantial improvements can not be expected in the near future; the main emphasis here might have to be placed on population control measures, combined with policies that promote equitable economic growth.

In the light of these questions, it would appear that research on the strategic issues associated with urban poverty policies should focus first of all on obtaining a better understanding of the nature and scope of urban poverty in LDC's; not only would this more detailed insight into the urban poverty problem be necessary to formulate more precise objectives and identify

the most effective instruments for poverty alleviation, but also it would provide a basis for comparison with the dimensions of poverty elsewhere in the economy, thus enabling the establishment of national priorities.

Research addressing itself to this issue must assume a household orientation; specifically, it should address itself to the urban poor as consumers and as producers.

Research focusing on the urban poor as producers should shed light on the way incomes are generated, in both the formal and the informal sector, and the potential for increased earning capacity, were opportunities available. Insight into the skill and age structure of the urban poor is of obvious importance in this respect, as is their access to complementary factors of production. Similarly, empirical information on the structure of wages and incomes by sector, skill class and age, and the functioning of the urban labor market, is important. In this connection, special attention should be paid to the informal sector, and its role within the urban environment. One thing that is not clear in this context is whether a clear picture of the urban poor as producers can be obtained in isolation of the rest of the urban economy, or whether a more comprehensive description of the production side in the entire urban area is necessary.

Similarly, greater knowledge of the urban poor as consumers is necessary for policy design. The consumption patterns of the urban poor are an obvious starting point for the design of subsidy and price policies that aim at improvements in standards of living, and/or changes in consumption patterns. They also provide a basis for quantifying the scope of the poverty problem by comparing actual consumption levels by category to some reference

consumption basket reflecting the policy objective of adequacy. It should be emphasized that the reference consumption basket should include marketed as well as non-marketed consumption items; the latter include services provided by the government at no direct cost to the consumer. Relative deficiencies by consumption category (e.g. nutrition, housing, education, health) may then permit the establishment of priorities.

Research in this area should be closely linked with ongoing research efforts in the area of income distribution. A substantial body of data has been built up on the size distribution of income, household expenditure patterns, and a variety of labor force characteristics. This may provide a good starting point for descriptive work aimed at providing a better picture of the urban poor.

The data intensive nature of this research effort dictates the need for an organizational framework for the information to be collected, and an analytical framework. Recently initiated research on social accounting matrices (SAM's)*/ as well as the research on improved models for country analysis, may provide the bases for the macro-economic analysis of these data needs. The former is in a more advanced stage of preparation, appears

---

*/ SAM's are a framework for the organization of variables and data, on the basis of an organizing principle which is essentially not different from the one underlying macro-models. They differ from traditional national accounts in a number of important respects. First, they provide a more comprehensive description of the economy under consideration. Secondly, in representing the accounting framework that should underlie any macro-model, they are more convenient as a basis for analytical work. Thirdly, the consistency of facts which is imposed by a SAM framework logically leads to a consistency of theorising regarding the economic relationships revealed by the observations. Fourthly, and most importantly, SAM's trace in detail production and consumption processes within the economy, and the mechanisms that underlie these processes. By introducing greater or lesser detail, SAM's can be used for regional analysis, urban analysis, as well as macro-economic analysis, the latter with an explicit representation of rural-urban interactions.

easier to use, and might therefore initially be the more attractive framework for data organization and analysis. As the research on improved economy-wide planning models proceeds, the formulation of an urban module within this model system is contemplated, and eventually the choice of appropriate analytical tool will obviously have to be reviewed.

## 6. Research strategy.

The research strategy suggested below is drawn up with two considerations in mind. One is that it is probably desirable to have a balanced portfolio of urban research, containing components of all categories that have been identified. Initially, the emphasis should perhaps be placed on research associated with the implementation of The Action Program, with a gradual increase in the effort on strategy research. The second consideration is that the resources available for urban research are limited, and that it will be necessary to set priorities for research within each of the categories. To indicate some order of magnitude, one would probably have to assume that not more than 10 man/years, and between $1.5 and 2 million of Research Committee funds for the next three years, will be available for the research program. This would be complemented by operational resources, including those available for the design, appraisal and implementation of specific projects and programs.

A complete concensus of opinion on research priorities and resource allocation will be hard to reach, and opinions are likely to diverge both in terms of topical priorities and with respect to the empirical

environment in which various approaches, projects and policies should be tested and implemented. However, on the basis of the discussions that have taken place on this subject so far, it would appear that the following approach to priority setting may be acceptable to most.

On a priori grounds, it would appear that research directly related to the implementation of the lending program as outlined in The Action Program deserves highest priority. As this component of the research program follows from operational needs, the issue of geographical priority does not come up.

As a complement to this highly operational analytical effort, it would appear that very high priority should be attached to the study of urban interdependencies in the context of a city. The approach that could be adopted is to focus on important components of the urban system separately, and to attempt to combine these at a later stage into a comprehensive systems study of the urban economy. The testing of this framework should initially be carried out in the context of a medium-sized city in a Type I or Type II country,*/ on the basis of a detailed empirical investigation of the nature and scope of urban poverty in that city. The rationale for this preference is that an explicitly urban focus appears to make more sense in the case of such countries than in the case of either a Type III or Type IV country. Not only does the urban poverty problem appear more tractable and manageable in the former types of country, but also it is a large part of the total development problem. Moreover, the alleviation of urban poverty appears feasible in terms of resource availabilities if only the countries in these categories were to attach greater priority to this objective. To

*/ See previous section for description of typology.

the extent the Bank is limited to playing the role of catalyst, therefore, focusing on these countries may be expected to have a relatively high payoff.

In contrast, an explicitly urban focus in the case of the Type III and IV countries appears less promising, at least in the short run. In the case of the Type IV countries, it is not clear what can be done to alleviate widespread urban poverty, in the light of even more substantial rural poverty and very limited resources available for its alleviation. The poverty problem in these countries should probably continue to be dealt with in the context of overall economic policies designed to lead to more equitable growth rather than in the form of undertakings with a specific urban focus. Moreover, research mentioned in the area of productive employment generation may have to be re-emphasized with regard to these countries.

The Type III countries (and perhaps to some extent also the Type II countries) could benefit considerably from research focusing on rural-urban interactions, designed to improve our understanding of the motivation for migratory flows, and the capacity of the urban economy to accommodate migrants, in terms of productive employment opportunities, and the provision of basic urban infrastructure and services. This research may result in the design of policies that can influence the form these rural-urban interactions may take. However, as a considerable amount of research in this area is currently underway, it would appear to deserve a somewhat lower priority than the issues mentioned above.

Other priority subjects, not identified above as deserving of

special emphasis in the program, are mostly research topics that are already incorporated in the Bank's research program. Although in many cases, the urban dimension could be more explicitly incorporated into the research design, nothing precludes this reorientation, and it was therefore felt that no special attention to such research ought to be drawn at this stage. As our understanding of the urban poverty problem grows, as a result of both operational work and research, the desirability of a more comprehensive reorientation of the research program will become clearer.

ANNEX

## Action Program and Interim Report of Urban Poverty Task Group: A Summary

The Action Program draws a distinction between Bank lending to the productive sectors and Bank activities in the infrastructure sectors. The former include mainly the work of the industrial units of the Bank Group (NDP, DFC, and IFC), while the latter involve urban projects, transportation and power, as well as education, nutrition, and population.

Regarding the productive sectors, The Action Program proposes that lending to large capital-intensive industrial projects should continue to receive strong support because of the alleged positive indirect employment effects of such projects. Moreover, the Bank should increase its lending to the more directly labor-absorptive branches of industry, i.e. those that have flexibility as to the technology that can be employed, and those that usually absorb large numbers of unskilled labor. Examples of the former are textiles, metal working, food processing; among the latter, transportation, construction and assembly are mentioned. Particular attention is drawn to the small scale enterprise sector, and its potential for productive employment generation. Substantial increases in Bank Group lending to support and promote small scale enterprises are recommended. Furthermore, indirect lending to industry (through industrial estates and other non-Bank intermediaries) should be increased. Finally, it is suggested that the Bank should move into credit and technical assistance to the informal sector, for which the "basic urbanization package" is proposed as the main vehicle; this package involves sites and services and slum upgrading projects.

The Action Program defines the Bank program objectives for the infrastructure sectors for two sub-groups of activities. The first one involves activities that can make a direct contribution to alleviating the conditions of the urban poor; included in this category are projects in basic urbanization, water supply and sewerage, education, nutrition and population. The second sub-group relates to those activities which through employment during construction and from facility expansion, and through providing inputs to the productive sectors make their contribution less directly; under this heading, transportation and power projects are specifically mentioned.

The Action Program proposes a very rapid increase in lending for basic urbanization package projects. These involve sites and basic services projects as well as slum upgrading projects. "It is this sector which, because of its 100% urban and 100% target population orientation, will bear a major responsibility for the infrastructure and informal sector side of the attack on urban poverty." In addition to basic urbanization projects, the Bank should focus on institution-building, urban finance and effective land use management. Moreover, urban transportation projects would continue to be a feature of urban lending.

In the case of water supply and sewerage projects, the primary Bank objective should be to reach a high proportion of the urban target population (at least 50% of the personal consumption beneficiaries of new projects by FY78, as proposed in The Action Program). Although there will be no relaxation of financial targets for the utilities involved,*/ it is proposed that by

---

*/ i.e., the principle of replicability will be maintained.

adopting lower standards of design, and service, and pricing policies that would differentiate by consumers' ability to pay, it will be possible to meet the targets. In this sector, a modest increase in net lending is proposed; the primary goal, however, is a redirection of effort so that the urban poor become to a greater extent the beneficiaries of projects in this area.

A considerable increase in lending for education projects is proposed. Attention is drawn to the need for a balance between rural and urban enrollment ratios. The Action Program does not include specific recommendations in the areas of nutrition and population; for the former, a modest lending program is proposed, while for the latter, no increase in lending over planned rates is recommended.

Research General

April 29, 1976

Mr. G. D. Jacobs
TRRL Overseas Unit
Crowthorne Berks RG11 6AU
England

Dear Godfrey,

Re: Surabaya Transport Study

Thank you for your letter of 5th April and for attaching Mr. Ford's letter of 30th March and his assessment of the possibilities of having the data collection for the Surabaya Transport study conform to IBRD requirements.

We note that it is unlikely that the consultants will carry out a home interview survey; that walking trips will not be dealt with; that travel times will not be measured; and that the main data collection is to be directed towards peak period travel. We appreciate that much of the information of interest to us could be obtained on payment, but unfortunately we have no budget out of which the necessary funds could be provided.

I hope that the study will go well and that it will benefit transport in Surabaya and your research needs. Please convey my best wishes to Mr. Ford.

With best wishes.

Yours sincerely,

G. J. Roth
Transportation & Urban
Projects Department

Cleared with and cc: Messrs. Harral
McCulloch

GJR GJRoth:sek

Kenneth gen

April 27, 1976

Professor Neal A. Roberts
Osgoode Hall Law School
York University
4700 Keele Street
Downsview, Ontario M3J 2R5
Canada

Dear Neal:

I trust you will believe that, Sunday afternoon or no, I was happy to hear from you, especially so to learn that you will be collaborating with the Lincoln Institute on a project as exciting as the one you described. Due largely to the mound of material I accurately foresaw would be waiting for me yesterday, I have not yet focused on conceptual or empirical approaches that might be worth considering. This I hope to do by the end of the week. For now I enclose two-thirds of what I promised: the Bogota case study of valorization charges, and an early draft of the methodological chapter of Bill Doebele's and my "urban land markets" monograph. The missing element, the Seoul/Gwangju, Korea case study of Land Readjustment, is temporarily "out of print," our initial run having been limited to the number of color reproductions we managed to get financed by the Bank' Cartographic Unit. Additional copies are in the works, however, and one will be forwarded to you, I hope, before the end of this week.

As I relayed to you over the phone, the operative word on Chapter II is "early." It was our first try at setting down, in non-technical language, aspects of urban land market behavior in developing countries that heretofore had been treated either in more technical detail or not at all. More genetic experimentation is needed to produce a workable hybrid. In particular, eschewing geometry, I failed adequately to convey in words the full story of producer's surplus in public service provision (pp. 25-27), and need to sharpen the discussion of supply elasticities, again without lapsing into jargon (pp. 22-23). The earlier treatment of workplace potential and site attributes announces some of our empirical results that will be written up in another chapter.

Thank you again for calling. I'll be back in touch shortly.

Sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Encl.

OFGrimes:gm OG

Research gen.

April 22, 1976

Dr. Bernard Berelson
7 Ardsley Terrace
Irvington on Hudson
New York 10533

Dear Dr. Berelson:

Kindly refer to your telephone conversations with Mr. Messenger on April 16 and 19. I understand that all the information you requested on April 16 has been provided except the following:

i. You wanted to find out the definition used by Mr. Saunders in his paper with respect to identifying expenditures for family planning listed in the summary i.e. were only family planning expenditures included or were all population related activities counted. We checked through the figures and it seems it was difficult for him to obtain consistency in the data. In some cases it includes expenditures only on family planning program and in others it includes related activities also. In paragraph B of page 9 of his paper he indirectly refers to this problem. Further, we also understand he used expenditure data in Population Council Fact Book.

ii. I am herewith enclosing the available background material on the three Regional Development Banks (the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank) which you also requested. The World Bank Group and these three regional development banks have adopted a reciprocal exchange of documents, including project documents, economic reports, documents on lending and financial policies and a wide range of statistical data. Consultations on lending programs both formal and informal between these banks take place regularly.

On April 14 you requested Mr. Messenger to find out if the information provided by us earlier that there were about 85 or so economic missions each year during the last three years is correct. We checked with P&B and found that the economic missions during FY74 and 76 ranged from 73 to 78 annually.

You also wanted to get a copy of 'every substantial statement made by Mr. McNamara on population' in addition to his major speeches. After considerable inquiry from different sources at the Bank we could lay our hands on two press interviews of Mr. McNamara where he made some comments on population - one was for NBC Meet the Press interview and the other was for Bill Moyers' Journal. Copies of these two interviews along with a press report from Rome Food Conference are enclosed and relevant sections marked.

On March 8 we sent you a table showing Bank Loans and IDA Credits by Purpose for FY70-75. In extracting the necessary information from the annual reports, we overlooked the fact that the basis for calculations of Loans and Credits changed since 1971. We have now recalculated this table in which the numbers are correct. Would you please replace the previous table we sent you with the attached?

Sincerely,

I. Z. Husain
Acting Division Chief
Population Projects Department

Attachments

cc: Dr. Kanagaratnam, PNPD
Mr. Messenger, PNPD (o/r)
Mr. Kang, PNPD
Mrs. Domingo, PNPD
Mr. Omman, PNPD
EXTERNAL REVIEW PANEL/PNP
IZHusain/ccc

## List of Attachments

- Relationship of the World Bank Group with Regional Development Banks
- African Development Bank (ADB) and African Development Fund (ADF) Operations
- Asian Development Bank - Annual Report 1974
- Agreement establishing the Inter-American Development Bank
- Mr. McNamara's press conference with Meet the Press (March 24, 1974)
- Mr. McNamara's TV interview at Bill Moyers' program (February 6, 1975)
- Press report from Rome Food Conference
- Bank Loans and IDA Credits by Purpose, FY1970-75

Research Gen

Mr. J. Blaxall, P & B

April 22, 1976

Benjamin B. King, VPD Signed B. B. King

Representation Charges to External Research Budget

1. I think my position on this subject is substantially the same as yours. There are two classes of expenditure which appear to be eligible:

(a) Meals for consultants visiting the Bank, but not Bank staff entertaining them. If the consultants paid for their own meal, it would be on the Research budget via their expense account.

(b) A modest "function" on the occasion of a conference.

2. I think that administrative officers in the DPS departments should be able to police this in an informal way at their discretion. If there are any impending excesses, they can refer to me, but I certainly don't want to be involved in general.

3. Does this conform with your memo of April 19? It is not clear whether you exclude the individual meals (a). I do not think it matters too much as the amounts would normally be small.

cc: Mrs. Cleave
Miss Gary
Mr. Lowther
Mr. Grimes
Mrs. Hazzah

BBKing:gm

Research

Mr. Ted Davis

April 21, 1976

Michael Cernea

Case Studies on Evaluation Units

The attached is a detailed outline for a case study on the organization and experience of the Evaluation Unit set up in Mauritius for the Rural Development Project. Such a case study would be included in the "Monitoring and Evaluation Learning Kit" to be prepared by RORSU. This outline is to be conveyed by Gus Schumacher, during his mission in Mauritius, to the head of the Unit, sociologist, S.R. Mehta, asking him to draft, if possible, an analytical report (or at least to start collecting the necessary information for such a case study).

MC:jd

cc. Messrs. Leif Christoffersen
David Turnham

DRAFT
MC:jd

Outline for a Report on :

ORGANIZATION AND EXPERIENCE OF A MONITORING AND EVALUATION UNIT IN MAURITIUS

1. The organization of the Project Monitoring/Reporting System.

- Description of existing system in DWC (organizational set-up).
- Chart.
- Reporting forms utilized in DWC.
- How does the Project Unit check the physical progress of various project components?
- The functions of the VDO in monitoring and supervising the works done by the DWC.
- The functions (if any) of the Project Evaluation Unit in the process of Project reporting (as distinct from evaluation).
  - Is that a checking function? (For instance, checking the accuracy of site reports). To what extent?
  - Is that a collating function, consolidating information in order to prepare the Quarterly
  - Progress Report?
  - Does the Evaluation Unit check the accuracy of the reports received from DWC?
  - Does it rely on VDO reports, parallel to DWC reports?

2. The organization of Evaluation Research.

- What is the "philosophy" of Evaluation work prevailing in the Management of the Rural Development Project?
- What is the Evaluation Unit's understanding of Evaluation?
- Which are the goals of evaluation work, as defined by:
  - The Mauritius Government.
  - The Project Management.
  - The Unit.
- Methodological approach to evaluation.
  - Did you extract the set of assumptions made at project appraisal time regarding the Project objectives and their impact on the Mauritius economy? Which are they?
  - Which evaluation tools have been worked out so far by the Unit?
  - List of indicators for evaluating each major project component (for evaluation measurements).
  - List of variables for the sets of indicators.
  - Please take component by component in the Rural Development Project and describe how did you approach it for evaluating:
    - the degree of responsiveness of project beneficiaries.
    - its implementation, as compared with the project's time-table.
    - the unpredicted (unanticipated) social and cultural difficulties confronted by each project component.
    - the impact of each component on the beneficiaries.

- on income;
- on employment;
- on nutrition pattern;
- on community life;

- Differential analysis is required for:
  - village markets;
  - self-help;
  - provision of employment through public works;
  - fodder etc.

- How is the Unit carrying out the sociological analysis of project beneficiaries?

  Who are they?
  - agricultural laborers;
  - unemployed;
  - young;
  - women;
  - the poorest or the richer ones?

  Did you identify any skewness in the distribution of project benefits?

- Evaluation of the institutional building impact of the project.
  - did the project emphasis on villages strengthen village management and community life?
  - do the village halls have any consequences on motivating and organizing the villagers for self-help on community projects etc.?
  - What is the impact (for good or bad) of the VDO institution on village awareness and on community mobilization?

- Other findings of the Evaluation Unit.
  - Please describe in detail the type of survey or case study undertaken and its findings. (You may wish to insist on the findings of facts and aspects/consequences which were not well known to the Project Management).
- How is the monitoring effort tied-in to the evaluation-of-impact-research? What use do you make of monitoring information in evaluation analysis?
- Feed-back: How are evaluation findings fed back to:
  - Project Management?
  - Ministry of Planning?
  - Other Ministries?
- Can you provide any examples of impact of evaluation findings on project work and on planning?

3. The organization of the Evaluation Unit

- Staffing and task assignments. (How is the research work organized and distributed? Please give chart as well.)
- Financing and costs of evaluation activities.
- Planning of research and relationship between:
  - operational evaluation (short-term and on-going evaluation);
  - long-term evaluation of impact;
  - in-depth analysis of various aspects (cost overruns in DWC, for example).
  - Relationships between the Evaluation Unit and other institutions in Mauritius:

- Research (economic and sociological) institutions in Mauritius.
- Central Statistical Board.
- The Census.
- The University.
- Ministerial units concerned with overall planning and with evaluation.

4. Early lessons of evaluation work.

- Methodological.
- Institutional and organizational.
- Responsiveness of officials.
- How should evaluation results be presented?
- Substantive lessons (project specific).
- Do you feel that you have collected more information than necessary or than you could process? Relying on your experience, which list of minimal information would you recommend for evaluating the impact of rural development?
- What changes would you introduce in the design of the evaluation unit, if you should have to organize it again from scratch?

- How would you describe the main difficulties you were confronted with so far?
- Planning of the activity of the Evaluation Unit for Fiscal Year 1977 (July 1976 - June 1977).
(Detailed plan, chart desirable, if possible. Attach, please, the Terms of Reference of the Unit).
- Please feel free to add anything you would think as being significant. Be specific, give details, facts and

Research General

FORM NO. 27
(11-75)

**WORLD BANK / IFC**
**OUTGOING MESSAGE FORM**
**(TELEGRAM/CABLE/TELEX)**

☒ IBRD
☐ IDA
☐ IFC
☐ ICSID

TO: PROFESSOR CHARLES COOPER
UNIVERSITY OF SUSSEX
BN1 9RF

DATE: APRIL 21, 1976

ORIGINATOR'S EXT.: 4235

COUNTRY: ENGLAND

CLASS OF SERVICE: ~~LT~~ C

CABLE NO. & TEXT:

VERY GLAD PAPER ON TECHNOLOGY IS ON WAY HERE STOP REGARDING RESEARCH PROPOSAL COMMA DEADLINE FOR SUBMISSION WRITTEN PROPORAL IS MAY TWENTY FOR DECISION AT JUNE SEVENTEEN RESEARCH COMMITTEE MEETING COMMA PROPOSAL DEADLINE FOR FOLLOWING MEETING IS EARLY JULY STOP OUR RECEIPT YOUR PROPOSAL BY FIRST MAY NECESSARY IF WISH DECISION IN JUNE STOP WHETHER SUBMIT FOR JUNE OR LATER DECISION COMMA YOUR VISIT HERE IN LATE MAY OR EARLY JUNE TO SEMINAR TECHNOLOGY PAPER EXCELLENT TIMING AS REGARDS PROPOSAL REGARDS

WESTPHAL

**NOT TO BE TRANSMITTED**

| | |
|---|---|
| REFERENCE: LEWestphal:mm | AUTHORIZED BY *(Name)*: L. E. Westphal |
| DRAFTED BY: L. E. Westphal | DEPARTMENT: Development Economics |
| CLEARANCES AND COPY DISTRIBUTION: | SIGNATURE *(Of individual authorized to approve)*: L Westphal |
| | *SECTION BELOW FOR USE OF CABLE SECTION* |
| | CHECKED FOR DISPATCH: |

PINK - File Copy; WHITE - Transmittal Copy; YELLOW - Bill Copy

Issued Signed

☒ IBRD
☐ IDA
☐ IFC
☐ ICSID

WORLD BANK / IFC
OUTGOING MESSAGE FORM
(TELEGRAM/CABLE/TELEX)

TO: PROFESSOR CHARLES COOPER
UNIVERSITY OF SUSSEX
BN1 9RF

DATE: APRIL 21, 1976

ORIGINATOR'S EXT.: 4235

COUNTRY: ENGLAND

CLASS OF SERVICE: LC

CABLE NO. & TEXT:

VERY GLAD RATHER ON TECHNOLOGY IS ON WAY HERE STOP REGARDING RESEARCH PROPOSAL. COMMA DEADLINE FOR SUBMISSION WRITTEN PROPOSAL IS MAY TWENTY FOR DECISION AT JUNE SEVENTEEN RESEARCH COMMITTEE MEETING COMMA PROPOSAL DEADLINE FOR FOLLOWING MEETING IS EARLY JULY STOP OUR RECEIPT YOUR PROPOSAL BY FIRST MAY NECESSARY IF WISH DECISION IN JUNE STOP WHETHER SUBMIT FOR JUNE OR LATER DECISION COMMA YOUR VISIT HERE IN LATE MAY OR EARLY JUNE TO SEMINAR TECHNOLOGY RAISES EXCELLENT TIMING AS REGARDS PROPOSAL. REGARDS

WESTPHAL

NOT TO BE TRANSMITTED

REFERENCE: LEWestphal:mm

DRAFTED BY: L. K. Westphal

DEPARTMENT: Development Economics

CLEARANCES AND COPY DISTRIBUTION:

SECTION BELOW FOR USE OF CABLE SECTION

CHECKED FOR DISPATCH:

DISPATCHED BY: L. K. Westphal

COMMUNICATIONS SECTION
APR 21 9 27 PM 1976

Research gen

April 20, 1976

Mr. David Segal
Department of Economics
Oberlin College
Oberlin, Ohio 44074

Dear Mr. Segal:

Thank you for your letter of March 23. I have looked through your chapter and find I have one or two points of criticism which you may or may not wish to take into account.

Page 10 -- I think you ought to distinguish whether you are talking about theory or practice; there is no such thing as perfect information, it is an ideal state and is useful only for theoretical construction. It is certainly not a necessary condition for marginal cost pricing!

Page 21 -- I find that your argument in favor of queuing, because of equity considerations, is rather misleading. The willingness to queue does not merely depend upon the wage per hour but it is also influenced by the income elasticity of demand for the commodity or services. If the income elasticity is very high and the price elasticity is very low, then of course the relatively rich will queue and secure the lion's share of a given quantity of services. Your statement that time prices are similar to a tax on wages is wrong.

I think these two points illustrate some of the difficulties I had with your manuscript.

Yours sincerely,

A. A. Walters

PS: Mr. Roth is writing to you separately.

Research gm

Ms. Rachel Weaving, VPD

April 20, 1976

Benjamin B. King, VPD Signed B. B. King

RIDEP

1. My own view of this program is that it should be spread broad and thin:

(i) "Broad" meaning a lot of institutions, most of those suggested by Regions etc.

(ii) "Thin" meaning very few documents, distributed as automatically as possible (i.e. through Ann Swift and/or Doris Bomstein).

I very much doubt that the mutual benefits of exchanging a lot of unsolicited stuff are very high. I haven't heard many cheers for RIDEP.

2. Accordingly, I would prepare two draft letters, one for existing RIDEP institutions, another for candidates:

(i) The candidate letter would ask whether they would like to be on our exchange list. The exchange would consist of the list in your 2(b) but without divisional papers on our part and the sort of thing suggested in your 2(a) on their part.

(ii) The existing-institution letter would explain that, owing to the greater scope of RIDEP, we are trying to confine exchange of documents to those specifically requested on both sides. Consequently, we are suggesting that we follow the procedure in (i) above. In other words, a polite withdrawal.

3. When we get lists, we turn them over to Research Files for notification in a special list of documents which can be obtained on request, if anyone is sufficiently interested, as you suggest.

4. I suggest you discuss with Orville next week and, if you agree, draft letters.

cc: Mr. Grimes

BBKing:gm

Research general

Mr. Edward V. K. Jaycox, TRU

April 20, 1976

Mona Hazzah, VPD MH

Research Projects Status Reports

I would appreciate it if you could have the attached Status Report forms completed and sent to my office (F1219) not later than Friday, May 14.

The information provided in the forms should be current as of April 30, 1976. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the March External Research Computer Printout where necessary.

| Project Code | Responsible Staff Member |
|---|---|
| 670-26 | B. Coukis |
| 670-27 | S. Agarwal/P. Fossberg |
| 671-13 | S. Agarwal |
| 671-14 | B. Mitchell |
| 671-15 | S. Basta/B. Coukis |
| 671-16 | G. Beier |
| 671-20 | P. Watson/E. Holland |

Attachments

cc: Mr. Rathnam (with attachments)

Research General

Mr. Y. Rovani, PBP

April 20, 1976

Mona Hazzah, VPD MH

Research Projects Status Reports

I would appreciate it if you could have the attached Status Report forms completed and sent to my office (F1219) not later than Friday, May 14.

The information provided in the forms should be current as of April 30, 1976. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the March External Research Computer Printout where necessary.

| Project Code | Responsible Staff Member |
|---|---|
| 670-67 | R. Sheehan |
| 670-76 | J. Warford |
| 671-11 | J. Warford |
| 671-12 | H. Shipman |

Attachments

cc: Miss P. Peter (with attachments)

MH:gm

Research General

Mr. R. Gulhati, ECDDR

April 20, 1976

Mona Hazzah, VPD MH

Research Projects Status Reports

I would appreciate it if you could have the attached Status Report forms completed and sent to my office (F1219) not later than Friday, May 14.

The information provided in the forms should be current as of April 30, 1976. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the March External Research Computer Printout where necessary.

| Project Code | Responsible Staff Member |
|---|---|
| 670-43 | J. Lowther |
| 670-45 | J. Lowther |
| 670-90 | A. Sant'Anna |
| 670-96 | J. Meerman |
| 670-99 | R. Moran |
| 671-02 | T. King |
| 671-03 | T. King |
| 671-05 | V. Prakash |
| 671-06 | R. Gulhati |
| 671-07 | L. Westphal |
| 671-18 | J. Linn |
| 671-19 | J. Simmons |
| 671-24 | S. Reutlinger |
| 671-25 | S. Bery |
| 671-26 | K. Zachariah |
| 671-30 | L. Squire/S. Bose |
| 671-31 | R. Sabot |
| 671-32 | L. Westphal |
| 671-37 | B. Renaud |
| 671-38 | D. Chernichovsky/R. Faruqee |

cc: Mr. Lowther (with attachments)

Attachments

MH:gm

Research General

Mr. J. Duloy, DRCDR

April 20, 1976

Mona Hazzah, VPD MH

Research Projects Status Reports

I would appreciate it if you could have the attached Status Report forms completed and sent to my office (F1219) not later than Friday, May 14.

The information provided in the forms should be current as of April 30, 1976. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the March External Research Computer Printout where necessary.

| Project Code | Responsible Staff Member |
|---|---|
| 670-01 | B. Balassa |
| 670-06 | M. Ahluwalia |
| 670-23 | Y. Rhee |
| 670-24 | E. Stoutjesdijk |
| 670-73 | G. Kutcher/P. Scandizzo |
| 670-83 | C. Chiswick |
| 670-84 | M. Ahluwalia |
| 670-85 | C. Chiswick |
| 670-86 | R. Norton |
| 670-87 | B. Balassa |
| 670-94 | M. Ahluwalia |
| 671-08 | C. Chiswick |
| 671-09 | E. Stoutjesdijk |
| 671-17 | P. Hazell |
| 671-27 | G. Pyatt |
| 671-29 | R. Norton |
| 671-33 | M. Selowsky |
| 671-35 | B. Balassa |
| 671-36 | C. Chiswick |

Attachments

cc: Miss Gary (with attachments)

MH:gm

Research General

Mr. B. B. King April 19, 1976

E. Lerdau

Research Proposal on Personal Distribution of Income

1. The Panel, consisting of Messrs. Bussink, Little, Villarzu, Jayarajah and myself met with Messrs. Eckaus and Ahluwalia on April 14. Mr. Grimes was also present.

2. The Panel agreed to recommend to the Research Committee that it approve the proposal. In this it was guided by the consideration that the possibility of exploiting a substantial body of data, available in many countries, to make independent estimates of the distribution of personal income is worth pursuing. Moreover, the particular approach suggested, while not devoid of considerable pitfalls, is ingenious and innovative. Finally, the amount involved is so small as not to raise serious concerns about the experimental nature of the proposal.

3. The pitfalls themselves were discussed at some length, and there was little disagreement about them between the proponents of the project and the Panel. They include both conceptual and empirical problems, many of which are already mentioned in Professor Eckaus' paper. Perhaps the least concern was felt about the possibility - in Method A - of groups with the same consumption propensities; Professor Eckaus persuaded the Panel that there were acceptable ways of dealing with this. On the other hand, the problem of non-homogeneous markets (e.g. geographic differences in prices) is not - in the opinion of the Panel - resolved in a convincing manner as yet. And it seemed to the Panel that the proponents were overly optimistic with regard to the quality of the total consumption data - aggregate and for individual commodities - on which Method A depends quite heavily. Both may be relatively minor problems in Malaysia - the test country - but are expected to prove serious in many other LDCs.

4. The Panel - and the proponents of the project - were more taken with Method A than with B. In the latter, especially the problem of multiple income earners per household - not in turn broken down by age - seems not to be susceptible to obvious solutions. Moreover, the conceptual basis for B seems more shaky than for A. Thus, for example, the implicit assumption that the sample is unrepresentative of the universe as far as the age distribution is concerned, but is nevertheless representative as far as the relation between age and income goes, bothered some members of the Panel. There was also some feeling that this relation itself had not been specified adequately for the analysis of a single point in time, having been transferred uncritically from life time income profile analysis.

5. While the Panel has no hesitation in recommending approval of the proposal, it wants to warn against the notion that the results will be either a test of the accuracy of other methods for estimating income distribution, or

- and this is more serious - will be testable themselves by the results of these other methods. Professor Eckaus appears to believe that the former is the case; the Panel disagrees but would have wished that the second alternative were true. But the proponents of the project have argued forcefully that the methods presently in use for estimating income distribution have such pronounced weaknesses themselves that no a priori basis exists for using them as standards by which to assay the Eckaus method. If this is true, using the Eckaus method for countries in which income distribution has been measured in other ways and from quite different samples (e.g. from tax returns, social security data, etc.) is likely to yield conflicting estimates without an obvious basis for deciding which is closer to the truth.

Cleared with
and cc: Messrs. Bussink
Little
Villarzu
Jayarajah

cc: Mr. Ahluwalia
Mr. Grimes

ELerdau:jd

Reserve General

Mr. Pierre Casse, Personnel Department

April 15, 1976

Benjamin B. King, VPD Signed B. B. King

Seminar on "Economics for non-economists: Projects Staff"

1. I refer to your memo of April 13 on the above seminar, specifically to the remark about observers at the end of the waiting list:

> "Observers - these may be included only if the demand from projects departments does not completely fill the intended number of participants."

2. That is putting it a bit strong. I am not sure whether the decision stems from a feeling that projects departments ought to have absolute priority or from doubts that the course would be of much benefit to Ms. Weaving or both. I would like, in any case, to reopen the question on both counts.

3. First, if there were an alternative course for non-projects people in general (rather than another specific group), then I can see that you might want to reserve this course solely for projects staff. But, if there is not, which is the case as far as I know, then it does seem discriminatory to treat other deserving cases as though they were travelling on a student ticket.

4. Ms. Weaving is the only editor in the DPS. Her job is to try to make the various documents coming out of the DPS more intelligible not only to other economists, but to non-economists as well. It isn't easy, I can assure you. On the one hand, it would help her to have some more training in economics so that she can communicate with authors better. She pointed this out in her annual performance review and I agreed. On the other hand, if we are to try to do something about dissemination in the Bank, it would obviously help an editor to know how non-economists react. I would have thought that this sort of course was a golden opportunity for her, unless you have an alternative to suggest. Would you reconsider?

cc: Messrs. Chenery, Karaosmanoglu, Dyck
Ms. Weaving

BBKing:gm

Research General

Mr. Hollis B. Chenery, VP - VPD April 14, 1976

Benjamin B. King, VPD Signed B. B. King

Report on DPS

1. I'm not sure what is expected from me in answer to your memo of April 8, but perhaps a few observations on research as one of the topics would answer it best. I agree very much that the right subdivision is by topic rather than by department.

2. I have a feeling that the prejudice against research, epitomized in Blaxall's statements about its vulnerability, ought to be met frankly and head on - not defensively. Some of the prejudice is more ill-informed than it need be. Maybe that's partly our fault. If so, we should say so and say what we are doing about it. This could be touched on at Thursday's meeting.

3. There was bound to be prejudice during the initial experimental period before any results emerged. There always will be some, but there ought to be less now or, at least, in the near future. I think one theme in your presentation could combine a reiteration of the length of the research production process, its riskiness and the difficulties of dissemination with the fact that we have had successes. I am often impressed by lists of references which consist very largely of names inside the Bank or closely associated with it. But that only goes so far. We have also reached the point of implementation in several cases. I think the tiresome old cliche about research being "Ivory Tower" needs a knock or two. It may have to be tower-bound, while it's being carried out and there's nothing much wrong with that. What is wrong is, if it stays there. This is where the Bank has a comparative advantage, which I think we are exploiting, though not, like everything else, with ultimate perfection.

4. Another problem is partly semantic and partly substantive. "Research is not operational", another cliche, means from the regional point of view "I have been saddled with a job for which I don't have the resources and want to use yours". So non-research is called operational research as opposed to ivory-tower research and why are we so unhelpful?

5. Maybe the time has come to devolve routine mission support to the regions much as CPS has devolved some subjects. DPS should emphasize special mission and special application support, for which there is a reasonably well identified purpose and in which the opportunity for research application can be grasped. It might be possible to plan this sort of thing with a modicum of precision through the CPP process with an eye to future basic missions. But that means making more of the process within DPS than an occasional ceremonial appearance at an RVP meeting.

6. Broadly speaking, I suppose I am suggesting that the list of topics be organized around a mental flow-chart, starting with the deepest sort of investment and proceeding to the ultimate disposal of the goods via operations and policy work. If it is agreed that this is what we are supposed to be doing, people can complain about the flow being rough, but they should stop bitching about the fact that we are not doing something else.

cc: Messrs. Karaosmanoglu
Duloy
Gulhati
Haq
Muller
Tims

BBKing:gm

INTBAFRA WASH DC

APR 13 1976

IBRD A PARIS

870 DIAMOND

REUR 716 AGREE WITH YOUR REMARKS RE BOTH PARA TWO AND FIVE OF DRAFT NOTE.

REYNAUD

INCOMING TELEX

Research General

DISTRIBUTION:

Mr. Diamond

SS

R. 4. 13

Research General

April 13, 1976

Mr. Clayton F. Ruebensaal
Director
Corporate Planning & Marketing Research
UNIROYAL Development Company
Division of UNIROYAL, Inc.
Oxford Management & Research Center
Middlebury, Connecticut 06749

Dear Mr. Ruebensaal,

I am very sorry to have missed the annual meeting of the IISRP in Williamsburg and with that the chance of talking to you about our rubber study. We have completed the part that deals with the NR production projections, NR costs and SR costs. I have not yet finished the part that deals with the elastomer consumption forecasts for the OECD countries to 1980, 1985 and 1990.

As you know, we have designed a forecasting model that is aimed at capturing some of the important changes in the market structure, particularly with regard to rubber demand in tires. The data that you sent me on average elastomer weights of tires were very useful. I have sampled other US tire manufacturers and received additional information on NR-SR mixes, but when it comes to the future, a great uncertainty seems to exist with regard to tire sizes and all the rest.

The enclosed short draft on natural rubber demand and price outlook contains some of the preliminary results of our study. The elastomer demand forecasts for the LDC's and CPE's are likely to stand as they are. Those for OECD are subject to change, since I don't have yet the complete model results for the US and Japan. This short write-up will be included in our annual commodity price forecast paper which comes out in June. Your comments on the rubber chapter would be much appreciated. I am also sending you a paper on energy and petroleum in non-OPEC developing countries, which may be of interest to you.

I look forward to receiving whatever comments you might have on the enclosed draft and to discussing with you the draft of our rubber research paper upon completion -- which will be around the end of the summer. I would also much appreciate receiving a preview copy of your annual paper on the rubber industry (with the statistical tables if at all possible).

With kind personal regards, I remain

Sincerely yours,

Enzo R. Grilli
Commodities and Export Projections Division
Economic Analysis and Projections Department

Enclosures
EGrilli:bjl

Research General

Research Committee Members

April 13, 1976

Benjamin B. King, VPD Signed B. B. King

Population Review Group

You will note from the attached memorandum that Mr. McNamara concurs with the recommendation to contribute $20,000 from the FY77 Research budget to the International Review Group on Research in Population and Development -- provided the Research Committee does. Would you please indicate, on this sheet or by telephone, whether or not you support this recommendation. We would much appreciate a response by Thursday, April 15.

Attachment

Distribution

Messrs. Chenery, Avramovic, Balassa, B. de Vries, Dubey, Jaycox, Lerdau, Thalwitz, van der Tak, Vergin, Waelbroeck, Yudelman, T. King, Grimes

OFGrimes:gm

Research General
4/14 To Dr. Cheney
I concur in your proposal regarding the Research Committee's decision. Robert

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

# OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara, President

DATE: April 9, 1976

FROM: Hollis B. Chenery, VP, Development Policy

SUBJECT: International Review Group on Research in Population and Development

1. You will recall that on December 8 I sent you a memorandum (copy attached) on the plans of a group of national and international agencies for the establishment of this review group. Your reaction to the proposal that the Bank participate was positive and you indicated that, if the Bank were to participate, the contribution should come from the Research budget.

2. The proposal was, therefore, submitted to the Research Committee on March 25. It was reviewed on the basis of its research contribution according to our normal procedure. The Committee felt that the objectives of the Group lacked focus and that this was not the most effective way of obtaining useful guidance. Furthermore, the Committee has consistently placed importance on "projectizing" research, which is impossible in this case, rather than giving core support and the like. While Committee members wish to record this opinion, based strictly on the merits in relation to research proposals, they recognize that the interagency negotiations on the proposal have a long history and that, on this account, the decision on participation may not be based on technical grounds alone.

3. I think we have to accept the fact that the Bank is morally committed. This is one of the follow-ups to our original initiative in consulting with the other donor agencies. Moreover, there is some value in avoiding the complete exclusion of the Bank from an international venture on this subject, which may have some pay-off in terms of dissemination, although I would not ascribe too much weight to this argument. However, there are still options as to the amount of the Bank's contribution. Other agencies have suggested that this be "proportionate" i.e. equal to other major contributors such as IDRC, Ford and Rockefeller - about $40,000. We could either:

(a) contribute our "proportionate" share, or

(b) contribute a lesser amount (for example, half).

4. In the light of other claims on the research budget, I recommend that we adopt option (b), the specific

amount being $20,000. I suggest this, first, because we are less than enthusiastic about the proposal, which has probably suffered from an effort to serve too many ends simultaneously. Secondly, the notion of proportionality is not particularly applicable, if one compares our Research budget with the resources available to other agencies for similar purposes. If this budget is earmarked in the future as the potential source of funds for similar proposals, I propose to obtain the Research Committee's views at an earlier stage.

Attachment

BBKing:gm

Research gen.

Mrs. J. Landell-Mills
Finance and Development
Orville F. Grimes, VPD

April 12, 1976

Research Projects Recently Completed

1. I attach a list of research projects that have been, or are about to be, completed since our prior list was circulated. Projects on income distribution, as you will observe, are prominent among the ones completed in the last few months. Mr. Ahluwalia's paper on "Income Inequality: Some Dimensions of the Problem," on which a September 1974 article in Finance and Development is largely based, is an outgrowth of the "Size Distribution of Income" project (670-09). Another product of this research -- his "Stylized Facts" paper -- could well be a prime candidate for a follow-up article. The Adelman/Robinson material, though not terribly easy to recast in your format, should also be considered.

2. I hope that we can remain in periodic touch on potential contributions to Finance and Development from the research program, if only by my letting you know of likely candidates as they become available. Please give me a call if you would like more information on the projects listed.

Attachment

cc: Mr. B. B. King
Mrs. Hazzah
Ms. Weaving

OFGrimes:gm

| Project Code | Title | Project Supervisor | Research Output |
|---|---|---|---|
| 670-02 | Country Programming Study: Chile | J. Duloy | 1) Clark, Peter B., and Foxley, A.R., "Target Shooting with a Multi-Sectoral Model," Ch. 13 in Analysis of Development Problems, R.S. Eckaus and P.N. Rosenstein-Rodan, Eds. Amsterdam: North-Holland Publishing Company, 1973.<br>2) Clark, Peter B., Foxley, A.R., and Jul, A.M., "Project Evaluation within a Macroeconomic Framework," Ch.7 in Analysis of Development Problems, R.S. Eckaus and P.N. Rosenstein-Rodan, Eds. Amsterdam: North-Holland Publishing Company, 1973. |
| 670-06 | Short-run & Long-run Influences upon Income Distribution | M. Ahluwalia | 1) I. Adelman and S. Robinson, A Wage and Price Endogenous General Equilibrium Model of a Developing Country: Factors Affecting the Distribution of Income in the Short Run. (Stanford University Press, forthcoming).<br>2) I. Adelman and S. Robinson, "A Wage and Price Endogenous Model for Planning Income Distribution Policy," (Development Research Center, August 1975; mimeo). |
| 670-09 | Size Distribution of Income | M. Ahluwalia | 1) Jain, Shail, Size Distribution of Income: Compilation of Data. Baltimore and London: Johns Hopkins University Press, 1975.<br>2) Kipnis, Julio, "Size Distribution of Income: Bibliography of Basic Sources." Bank Staff Working Paper No. 217, September 1975.<br>3) Ahluwalia, Montek S., "Income Inequality: Some Dimensions of the Problem," Ch. I in Redistribution with Growth. London: Oxford University Press, 1975.<br>4) Ahluwalia, Montek S., "Income Distribution and Development: Some Stylized Facts," December 1975. To be published in Papers and Proceedings of the American Economic Association, May 1976. |
| 670-13 | Evaluation of Alternative Methods for Specifying Agricultural Sector Development Strategies: Portugal & Brazil | A. Egbert | 1) Egbert, Alvin C., "A Development Model for the Agricultural Sector of Portugal," World Bank Occasional Paper No.20, 1975.<br>2) Egbert, Alvin C., and Kim, Hyung M., "A Regional Planning Model for the Agricultural Sector of Portugal" in Studies in Linear Programming, Harvey M. Salkin and Jahor Saha, Eds., Amsterdam and New York: North-Holland/American Elsevier, 1975. |

| Project Code | Title | Project Supervisor | Research Output |
|---|---|---|---|
| 670-13 (continued) | Evaluation of Alternative Methods for Specifying Agricultural Sector Development Strategies: Portugal & Brazil | A. Egbert | 3) Egbert, Alvin C., and Kim, Hyung M., "Analysis of Aggregation Errors in Linear Programming Planning Models." American Journal of Agricultural Economics, May 1975, pp. 272-301.<br>4) Egbert, Alvin C., and Estacio, F., "Regional Agricultural Planning." In Study of Agricultural Systems, G.E.Dalton, Ed. London: Applied Sciences Publishers, 1975.<br>5) Ablasser, Gottfried, and Egbert, Alvin C., "Brazil Agricultural Sector Planning Model - an Application of Mathematical Regional Programming: A Summary Report," Agriculture and Rural Development Department, Working Paper No. 1, December 1973.<br>6) Egbert, Alvin C., and Kim, Hyung M., "Statistical Annexes to a Development Model for the Agricultural Sector of Portugal, 4 vols.: Vol. I, 1968 Model Results; Vol. II, 1980 Model Results; Vol. III, Basic Resources and Input-Output Data, 1968; Vol. IV, Basic Resources, 1980, and Input-Output Data Improved Practices (mimeo), 1974. |
| 670-69 | Growth & Income Distribution in Brazil | R. Norton | Bacha, Edmar M., and Taylor, Lance: "The Unequalizing Spiral: A First Growth Model for Belindia," Quarterly Journal of Economics, 1975. |
| 671-21 | Foodgrain Production in Asia | F. Lowenstein | Hendrix, W.E., "Foodgrain Supply-Demand Situation and Prospects in Eleven Asian Nations." (November 1975; mimeo.) |

April 12, 1976

Research gm

April 9, 1976

Mr. Jon Meeks, Administrator
Division of Code Enforcement
Department of Metropolitan Development
Indianapolis, Indiana 46204

Dear Jon:

I enjoyed meeting you the other night, though as it turned out there was little opportunity to discuss the concept and practice of urban land use controls and land planning.

As promised, I enclose copies of two research papers having to do with urban land taxation and, more generally, the direction of desired public interventions in the urban land market. The first is a theoretical and empirical study of land value increments that are due to actions of the public authorities rather than to improvements by owners or tenants. In addition to the conceptual analysis of land market behavior, the section on betterment recapture as it is practiced in four European and four Asian countries may be of interest. The second paper, an outgrowth of a research project on "Urban Land Taxation and Control," deals with the broader canvas of taxes on urban land as it may apply in either the developing or the developed world.

Since we touched briefly on the research program of the World Bank, I thought you might also be interested in a more detailed description. Abstracts of Current Studies provides a glimpse at the range of studies the Bank is undertaking.

I hope we can keep in touch, Please let me know if you would like more details on any aspect of our work.

Sincerely yours,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Attachments

OFGrimes:gm

Research gen

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

# OFFICE MEMORANDUM

TO: Mr. E. V. K. Jaycox, Director, Trans. & Urban Proj. DATE: April 8, 1976

FROM: Alastair Stone, Chief, Urban Operations Review and Support Unit

SUBJECT: The Fiscal Impact of Urban Projects - Proposal for Study and Design of Draft Guidelines

1. Attached is a proposal for a study of fiscal impact of urban projects, prepared by Messrs. Lethbridge, Linn and Whitehead. The proposal has been cleared in its final form by Messrs. Churchill and Ray and I have approved it for 50% financing from the Unit's budget. The remaining 50% is to come from D. Keare's budget and I understand he has authority from Gulhati to proceed.

2. The study begins at an appropriate scale our investigation into the broader financial implications of projects and will provide some guidance not only to project work but to country economic and city specific work in this area. Happily it also brings closer to operational significance the city fiscal study conducted previously by DPS and as such is a good first example of the way in which Keare and I see ourselves working together on these areas of research.

3. As noted in the proposal the study is scheduled to start in May and be concluded by September. Preliminary discussions with Prof. Wasylenko who has worked for DPS on the city based studies and for the IMF on local finances in Kenya, indicate that he will be available. He is also scheduled to participate in a preappraisal mission for the Second Urban Project in Zambia which provides a good complement to the proposed desk study. Prof. Roy W. Bahl who is currently heading the IMF study on local finances in Kenya, is also expected to assist in reviewing the work.

AStone:dd

cc: Messrs. Dunkerley, Churchill, McCulloch, Strombom, Venkateswaran, Beier, Lethbridge, Whitehead (TRUPD); Keare, Linn (DPS)

Research General

Research Committee Members April 7, 1976

Benjamin B. King, VPD Signed B. B. King

Optimality of Tax-Subsidy Intervention

We decided at the March 25 meeting of the Research Committee that this proposal, which requests $4,800 in FY76 funds for a methodological paper on tax and subsidy interventions in food-wage goods sectors, should be reviewed for its relevance to CPS research and policy work of a similar nature by an ad hoc group under Mr. van der Tak. Attached are the findings of this group. Would you please indicate, on this note or by telephone, whether or not you support the recommendation in (v), page 2 of Mr. van der Tak's memorandum. If possible, a reply by this Friday, April 9, would be much appreciated; otherwise by early afternoon Monday, April 12. Thank you.

Attachment

cc: Mr. Grimes
Mr. Ahluwalia
OFGrimes:gm

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

# OFFICE MEMORANDUM

TO: Mr. Orville F. Grimes, Jr.

DATE: April 6, 1976

FROM: H. G. van der Tak

SUBJECT: Proposal on Optimality of Tax-Subsidy Intervention

I have talked to Montek Ahluwalia and Colin Bruce about the above research proposal and its relation to the case studies on agricultural taxes and subsidies that are being organized by Colin Bruce and the issues paper on this topic to be prepared by CPS/AGP and DPS/EPR. The general picture appears to be the following:

(i) Three of the four case studies to be undertaken this fiscal year are being carried out as part of basic or updating economic missions. Any research done for the issues paper will be carried out as part of the regular agricultural economic work, but focussing on a particular issue, and will be largely carried out by regular Bank staff. The one exception is the case study in Argentina, now being undertaken by a local consultant, which is expected to have greater depth and should be classified as "research." The same is true of the four additional country case studies tentatively planned for the first half of Fiscal 1977, and the follow up -- with consultants -- of three of the FY75 studies, which are to be intensive studies employing both Bank staff and suitable consultants. In addition, two of the countries in the Balassa directed Western Africa Study will be reviewed to see what additional work will be required to fit these studies within the framework of the Agricultural Prices and Subsidies Study.

(ii) A specific paper setting forth a methodology to be used in these studies is being prepared and is expected to be available by the end of April. At present, the case studies are guided by Colin Bruce's draft outline and by general references to Bela Balassa's work on incentives and comparative advantages in West Africa (which is primarily addressed to industrial problems) and to Squire/van der Tak on Economic Analysis of Projects.

(iii) The issues paper on agricultural prices and subsidies is currently scheduled to be ready for staff level PRC Review by December 30, 1976, but its timing is being reconsidered. Individual country studies would be used to the extent that they are completed; all are expected to be completed by March, 1977. On its present schedule, the issues paper could only marginally benefit from initial results of some of the more intensive case studies.

(iv) The proposed study by Professor Bertrand is to spell out a partial equilibrium methodology a la Bela Balassa and Squire/van der Tak, etc. but it will focus, in particular, on the general equilibrium aspects of agricultural tax and subsidy policies and try to propose a suitable methodology for taking those aspects into account. If started immediately and if completed in draft by, say, June 30, Professor Bertrand could help

define the methodology now being drafted for the early case studies and possibly propose suitable modifications to be introduced in the more intensive case studies that are planned for the first half of FY 1977. His work might also provide useful underpinning for the issues paper.

(v) I would recommend to the Research Committee that it approve the proposed study to be undertaken by Professor Bertrand on condition that he be asked:

(a) to review and contribute to the methodology note now being prepared by Colin Bruce;

(b) the study be directed jointly by Messrs. Ahluwalia and Bruce, who would be expected to consult at appropriate stages with, for example, Messrs. Balassa, Little, Ray and Squire; and

(c) a first draft of the study be completed by June 30.

This recommendation assumes, of course, that Professor Bertrand's qualifications for this study are beyond question. I understand that Messrs. Balassa and Ahluwalia vouch for him.

HGvanderTak:lfb

Cleared with and cc: Messrs. Ahluwalia and Bruce
cc: Messrs. Chenery, King
Duloy
Yudelman

Research General

Mr. Leif E. Christoffersen April 6, 1976

August Schumacher

Proposals for Applied Research

Further to your request, I have listed below a number of suggestions for applied research. On a number, I have been keeping files and on some (livestock, consultants) I have begun drafting some research notes and outlines. Others are in a very preliminary stage. Please tick those ideas which Tom and yourself think worth pursuing, and I will prepare some further notes.

QUANTITITATIVE METHODS IN MONITORING AND EVALUATION COMPONENTS

In a number of projects, Governments have organized evaluation teams (See Anderson et al (1976). Considerable funds are being committed and in a few cases spent. (Mexico, Nigeria, Malawi, Mauritius). However, a number of these projects cannot afford the over head luxury of full time expertise to assist them in setting up the techniques of survey and survey analysis to gather the base line and ex post data required to measure project progress. Thus, I would suggest that a Project running upwards of US$150,000 be developed to recruit a three man consultant team for two years who would be specialists in statistical techniques. They would do an in-Bank review the types of problems facing many of our borrowers evaluation units and then work with the borrowers on short terms missions to assist them in getting correct survey methodologies introduced.

(1) The Role of Livestock in Rural Development

Much focus is given in the Bank to developing technical packages for small farmers. In most cases, these packages only include crops, usually grains. The role of livestock and in particular small-scale traditional production, is given minimum treatment. However, livestock in many cases is crucial to both the success of the package and the welfare of the rural people, in providing power, transport and manure as well as food, prestige and insurance. There have, however, been numerous attempts by various governments and donor agencies to intervene in traditional livestock systems with the objective of increasing productivity and rural incomes, particularly in French-speaking West Africa. Pilot projects in goat, sheep, pig, poultry, rabbit, bee, buffalo, and small-scale beef and dairy production have been undertaken in many countries, with a mixed history of success. The more successful projects of this nature have presumably been those conducted on a limited geographic basis with full awareness of the location specific interactions between the livestock, cropping and social systems in the target area.

In view of the importance of livestock in the rural areas, a review of the current status of ongoing initiatives in this sub-sector is suggested. Such a review would provide technical, financial and "social feasibility" guidelines to staff preparing rural development projects. A six to eight man-month study to undertake this review and

propose guidelines and possible changes in Bank project lending is therefore proposed. Jim Edgerton and I could supervise such a study, in conjunction with Don Stoops. Don, as you know, undertook a summary effort along these lines in 1973 (copy attached).

(2) Householder Vegetable Production

Both in Mauritius and Mexico, the Bank projects are actively encouraging "kitchen gardens" through self-help schemes. In both cases, villagers have taken readily the materials offered, and put them to good use. In Mexico, the provision of seeds etc. is accompanied by women home economics workers who assist village women in vegetable and fruit canning. The research proposed would be to review experience on the organizational side, as well as to review what species compositions of vegetable gardens are being recommended from both nutritional and technical viewpoints. Again Jim and I could assist in the design. Manpower required would be about four months.

(3) The Role of Consultants in Rural Development

In a considerable number of cases, consultants are being asked to assist governments in preparing rural developing strategies and specific projects (Algeria, Ecuador, etc.). The proposed research project would be to review the successes and failures of consultants in agricultural and rural development projects in various countries both from the consultant's, the agency's and the client's point of view. The proposed research project would take about 8 man-months and involve a fair bit of questionnaire work with consulting firms by mail. I have written a paper on this subject and would be prepared to draft in detail a research proposal based on the conclusions of my paper titled "The Role of Consultants in Agricultural Development".

(4) Soil and Water Conservation: Comparative experience

In many countries in the world, governments are attempting to do something about erosion and water retention. In more countries, nothing is being done. In Mexico, for example, 47% of the arable land is affected by erosion. I have written in more detail about the possibilities of some multi-country analysis of the economics of soil and water conservation components (UNEP note dated October 1975), the labor intensity of soil conservation works in different countries, and comparative maintenance and organizational systems in selected countries. For an initial survey, I would expect some 10 to 12 man-months of work would be required. In our own rural development projects, Mexico, Tanzania, Algeria etc. mention has been made of the problem of erosion and the need for inexpensive water retention works as part of the "technical package".

(5) Cost Recovery and Fiscal Problems of Rural Development Projects

Currently, the Bank has not devised a coherent policy of cost recovery or lack thereof, under its rural development lending program. In many cases, electrification is often recovered fully, whereas agricultural infrastructure, such as irrigation and livestock investment, is rarely recovered. Investment costs in health, roads, water supply are also rarely recovered. Even, under credit projects, the ~~recover of~~ recovery of investment, in real terms, of effective relendable resources, is only probably on the order of 30% to 55% of original resources lent.

What would be useful would be a comparative study which at a minimum would at least lay out the issues and examine a few of the alternatives. For example, one method of stretching resources is to design programs where cost recovery takes place up front, by maximizing the cash, kind and labor contributions made by beneficiaries. In the US., the soil conservation program was a 50% cash contribution, 50% Government grant. This worked fairly well in getting this program spread throughout the country on a county by county basis.

(6) Storage of Food at the Village Level

I attach my note on "Investment and Technology in Food Delivery" (Jan. 1976) unpublished. Some of the issues raised in the first five pages could well require some additional work. Perhaps Colin Bruce and the CGFPI are looking into these issuds. If not, other groups probably should.

(7) MEXICO - PIDER Case Study

Ben Thoolen and I rewrote the appraisal report and a number of the annexes in the hopes we could issue this as case study on a more unrestricted basis than the gray cover report. Unfortunatelly, time has prevented us from editing and finalizing the document. It would be most useful if we could obtain two to three months assistance of both a good editor and a spanish speaking research assistant to pull together the remaining bits and put them into "distributable" shape. Time: four months of sub-professional assistance under my direction. Perhaps a good summer intern could do the job at quite low cost.

RURAL DEVELOPMENT SERVICE CENTERS

Missing in rural development projects are inexpensive rural development service centers with a command area of about 2,000 families (10,000 persons). In Mauritius, the Project is supporting both village markets and village community centers. Early evidence indicates that the community centers are popular and serve a variety of local functions (family planning, young farmers clubs, library, weekly clinic, TV room, village meetings, etc.). Since they have been constructed fairly rapidly, they have also been serving as an informal distribution center for productive

self-help materials provided under the Project. Also the Village Development Officer under the Project is using these new centers as his informal headquarters to post notices, deliver self-help materials, organize visits to surrounding villages etc. To make this more sustaining, the concept of a Service Center combining the functions of a village center, village market, office for village development workers and input warehouse for small scale productive projects has some appeal.

However, some applied research (US$100,000) would be necessary to examine the functions, staffing and design of such a Service Center in different countries which inter alia could be organized to:

(1) Raise the productivity and incomes of small farmers;

(2) Make foster and sustain household kitchen gardens (Mauritius, Mexico);

(3) Improve productivity of those now engaged in sub-marginal non-farm occupations on a part-time or full-time basis;

(4) Provide site and services for new non-farm productive activity -small village industries which are intensive in the use of local materials and local labor;

(5) Encourage specialization and trade between micro-regions and export to urban centers.

The development of such service centers require appropriate physical infrastructure:

(1) A communication and transport network which connects villages in the area to the center;

(2) A market-place with stalls where loca produce from the hinterland can be sold and facilities for storage of (a) local produce to be exported to other areas; and (b) simple inputs for local use (fertilizer, seeds, etc.);

(3) Space and facilities for growth of village industries near the market place;

(4) Appropriate training education, medical, social and recreational facilities.

cc: Mr. D. Turnham
ASchumacher/cp

Unless the Bank is seriously interested to have an urban transport project in Surabaya I do not think we should pursue this study.

✓ Research Engineer
Messrs Dunkerley
Hamal
McCulloch
Zahari
Roth

**Transport and Road Research Laboratory**
**Department of the Environment**
Crowthorne Berks RG11 6AU
Telex 848272 Telephone Crowthorne 3131

Mr G Roth
IBRD
1818 H Street NW
WASHINGTON DC20433
U S A

Your reference

Our reference 90/97/08

Date 5 April 1976

Dear Gabriel

I discussed the possibility of using the Surabaya project to provide the Bank with raw data with the consultants appointed (Freeman Fox) They have now replied and I am enclosing a copy of their assessment.

As you can see they will either 'definitely' or 'probably' provide most of the data required but would want to be paid for collecting additional information on travel times. Some of this however, will have been collected during the traffic management study and we can obtain it through David Stewart.

They then list a category D "unlikely in any circumstances". With the pressure under which they will be working I think we must accept this, but again the data may be available from other sources. For example average trip fares on betjaks will be collected by us when we investigate various forms of public transport operating in Surabaya later in the year.

I doubt whether we or anyone else will be collecting information on walking trips. If you regard this as essential we might be able to persuade Freeman Fox to collect the necessary information but they would, of course, require payment. Could the Bank provide this?

Phil Fouracre and I will be going to Chieng Mai in mid-May and will keep you informed of any developments. As mentioned above, we shall be continuing this research in Surabaya later in the year and hope to visit Kuala Lumpur on the way. We shall take this opportunity of having a good look at the mini buses.

Yours sincerely

G D Jacobs

G D JACOBS
Overseas Unit

ENC

APR 09 1976
Transportation and Urban Projects
Department Correspondence

Office of the Director
Answered by: G J Roth
Date: 4/29/76

RECEIVED

Unless the Bank is seriously interested in some on-going transport project in Surabaya I do not think we should pursue this further.

Messrs. Burling, Thomas, Wellisch, Zahn, Roth

Transport and Road Research Laboratory
Department of the Environment
Crowthorne Berks RG11 6AU
Telex 848272 Telephone Crowthorne 3131

Mr G Roth
IBRD
1818 H Street NW
WASHINGTON DC20433
U S A

Your reference

Our reference 90/97/08

Date 5 April 1976

Dear Gabriel

I discussed the possibility of using the Surabaya project to provide the Bank with raw data with the consultants appointed (Freeman Fox) They have now replied and I am enclosing a copy of their assessment.

As you can see they will either 'definitely' or 'probably' provide most of the data required but would want to be paid for collecting additional information on travel times. Some of this however, will have been collected during the traffic management study and we can obtain it through David Stewart.

They then list a category D "unlikely in any circumstances". With the pressure under which they will be working I think we must accept this, but again the data may be available from other sources. For example average trip fares on bettjake will be collected by us when we investigate various forms of public transport operating in Surabaya later in the year.

I doubt whether we or anyone else will be collecting information on walking trips. If you regard this as essential we might be able to persuade Freeman Fox to collect the necessary information but they would, of course, require payment. Could the Bank provide this?

Phil Fourcere and I will be going to Chiang Mai in mid-May and will keep you informed of any developments. As mentioned above, we shall be continuing this research in Surabaya later in the year and hope to visit Kuala Lumpur on the way. We shall take this opportunity of having a good look at the mini buses.

Yours sincerely

G D JACOBS
Overseas Unit

ENC

Chairman Executive J O Tresidder

Associates J H Earp D S Kennedy D S Walton
R Barrett P N Daly D J Ford
M J Foyster L P Kirwan J R Partridge
D T Silcock S L Sumner

Consultants G G Dobson M Sc, MICE, MIHE
I G Heggie B Sc, MA, MICE, MCIT

Company Secretary R M Eley

# Freeman Fox and Associates
TRANSPORTATION AND PLANNING CONSULTANTS

**28-30 Grosvenor Gardens**
**London SW1W 0DY** **Telephone: 01-730 4500**

Cables: Frefox, London SW1 Telex: 8811763 (Ffanda Ldn)

DJF/SM/7270

G. Jacobs Esq.,
Transport and Road Research Laboratory,
Crowthorne,
Berkshire.

30th March, 1976.

Dear Mr. Jacobs,

Surabaya Transport Study

Further to our meeting of 3rd March 1976 when we discussed the possibility of collecting data for the above study which would conform to IBRD requirements I have indicated on the attached schedule the likelyhood of the various types of data being available. You will appreciate that this is a preliminary assessment based on known information at the present time. In particular we are likely to propose that our main data collection effort will be directed towards peak period travel and any information on daily travel will be obtained by factoring using daily data collected at a limited number of "control" sites. Also, it is extremely unlikely that we shall carry out a home interview survey. not adequate

The categories marked on the attached schedule are as follows:

A - Definite

B - Probably

C - Possible at a cost which in some cases (e.g. 6.5) would involve a home interview survey

D - Unlikely under any circumstances.

I trust that this gives you the information you require and look forward to hearing from you in due course.

Yours sincerely
Freeman Fox and Associates.

D Ford
D.J. Ford.

Form 4.5-1

# SUMMARY TABLE

for the presentation of Comprehensive Transportation Studies to the IBRD

City SURABAYA... Country INDONESIA...

| | | Base Year..... | Intermediate Year..... | Design Year..... |
|---|---|---|---|---|
| **1.** | **Study Area** | | | |
| 1.0 | Study Area | | | |
| 1.1 | Ground Area | | | |
| 1.2 | Urbanized Area | | | |
| **2.** | **Population** | | | |
| 2.0 | Population | | | |
| 2.1 | Households | | | |
| 2.2 | Labor Force | | | |
| 2.3 | Employment | | | |
| 2.4 | Average HH Income | | | |
| 2.5 | Average HH Disposable Income | | | |
| 2.6 | Average HH Expenditure on Travel | | | |
| **3.** | **Vehicles** | | | |
| 3.0 | Autos | | | |
| 3.1 | Motorcycles | | | |
| 3.2 | Commercial Vehicles - Light | | | |
| 3.3 | Commercial Vehicles - Heavy | | | |
| 3.4 | Buses | | | |
| 3.5 | Taxis | | | |
| 3.6 | Other | | | |
| | **The Road System** | | | |
| 4.0.0 | Locals: Road Length | | | |
| 4.0.1 | Avg. No. of Lanes | | | |
| 4.0.2 | Daily VKT | | | |
| 4.0.3 | Daily VHT | | | |
| 4.0.4 | Daily Avg. Speed | | | |
| 4.1.0 | Arterials: Road Length | | | |
| 4.1.1 | Avg. No. of Lanes | | | |
| 4.1.2 | Daily VKT } Peak to Daily flow conversion | | | |
| 4.1.3 | Daily VHT } Peak to Daily flow conversion | | | |
| 4.1.4 | Daily Avg. Speed } Peak to Daily flow conversion | | | |
| 4.2.0 | Expressways: Road Length | | | |
| 4.2.1 | Avg. No. of Lanes | | | |
| 4.2.2 | Daily VKT } Peak to Daily flow conversion | | | |
| 4.2.3 | Daily VHT } Peak to Daily flow conversion | | | |
| 4.2.4 | Daily avg. Speed } Peak to Daily flow conversion | | | |
| 4.3.0 | No. of Signalized Intersections | | | |
| 4.4.0 | No. of Parking Spaces | | | |
| 4.5.0 | No. of On-street Parking Spaces | | | |

See explanations on the other side of the Form

Cont'd.

City .....

Country .....

| | | Base Year..... | Intermediate Year..... | Design Year.... |
|---|---|---|---|---|
| | **5. The Public Transport System** | | | |
| | 5.0 Buses | | | |
| A | 5.0.0 No. of Vehicles | | | |
| A | 5.0.1 Line Length | | | |
| A | 5.0.2 Daily VKT | | | |
| A | 5.0.3 Seat Capacity | | | |
| A | 5.0.4 Daily avg. Comm. Speed | | | |
| A | 5.0.5 Average Trip Fare | | | |
| | 5.1 Mini-Buses (Bemo's) | | | |
| A | 5.1.0 No. of Vehicles | | | |
| A | 5.1.1 Line Length | | | |
| E | 5.1.2 Daily VKT | | | |
| A | 5.1.3 Seat Capacity | | | |
| C | 5.1.4 Daily avg. Comm. Speed | | | |
| A | 5.1.5 Average Trip Fare | | | |
| | 5.2 School Buses Not Applicable | | | |
| | 5.2.0 No. of Vehicles | | | |
| | 5.2.1 Daily VKT | | | |
| | 5.2.2 Seat Capacity | | | |
| | 5.3 Collective Taxis (see Bemo's) | | | |
| | 5.3.0 No. of Vehicles | | | |
| | 5.3.1 Daily VKT | | | |
| | 5.3.2 Daily avg. Comm. Speed | | | |
| | 5.3.3 Average Trip Fare | | | |
| | 5.4 Rapid Mass Transport System Not Applicable | | | |
| | 5.4.0 No. of Vehicles | | | |
| | 5.4.1 Line Length | | | |
| | 5.4.2 Daily VKT | | | |
| | 5.4.3 Seat Capacity | | | |
| | 5.4.4 Daily avg. Comm. Speed | | | |
| | 5.4.5 Average Trip Fare | | | |
| | 5.5 Taxis and Becaks | | | |
| A | 5.5.0 No. of Vehicles | | | |
| D | 5.5.1 Daily VKT | | | |
| D | 5.5.2 Average Trip Fare | | | |
| | **6. Travel Characteristics** | | | |
| | 6.0 Number of Internal Tripmakers | | | |
| A | 6.0.0 Auto Driver | | | |
| A | 6.0.1 Auto Passenger | | | |
| A | 6.0.2 Motorcycle Driver | | | |
| A | 6.0.3 Motorcycle Passenger | | | |
| A | 6.0.4 Public Transport Passenger | | | |
| C | 6.0.5 Mixed Modes, Private & Public | | | |

Cont'd.

City .....

Country .....

| | | Base Year..... | Intermediate Year..... | Design Year.... |
|---|---|---|---|---|
| | 6.1 Number of Internal Person Trips | | | |
| D | 6.1.0 Walking | | | |
| A | 6.1.1 Auto Driver | | | |
| A | 6.1.2 Auto Passenger | | | |
| A | 6.1.3 Motorcycle Driver | | | |
| A | 6.1.4 Motorcycle Passenger | | | |
| A | 6.1.5 Bus Passenger | | | |
| A | 6.1.6 Mini-Bus Passenger (Bemo) | | | |
| - | 6.1.7 School Bus Passenger Not Applicable | | | |
| A | 6.1.8 Collective Taxi Passenger (Bemo) | | | |
| - | 6.1.9 Mass Transit System Passenger Not Applicable | | | |
| A | 6.1.10 Taxi Passenger and Becak | | | |
| C | 6.1.11 Commercial Vehicle Passenger | | | |
| | 6.2 Number of Internal Vehicle Trips | | | |
| A | 6.2.0 Auto | | | |
| A | 6.2.1 Motorcycle | | | |
| A | 6.2.2 Commercial - Light | | | |
| A | 6.2.3 Commercial - Heavy | | | |
| A | 6.2.4 Taxi | | | |
| A | 6.2.5 Other | | | |
| | 6.3 Person Trips by Purpose - Private | | | |
| A | 6.3.0 Home | | | |
| A | 6.3.1 Work | | | |
| C | 6.3.2 Business | | | |
| C | 6.3.3 Personal | | | |
| C | 6.3.4 School | | | |
| C | 6.3.5 Shopping | | | |
| C | 6.3.6 Social-Recreation | | | |
| A | 6.3.7 Other | | | |
| A | 6.3.8. Total | | | |
| | 6.4 Person Trips by Purpose - Public | | | |
| A | 6.4.0 Home | | | |
| A | 6.4.1 Work | | | |
| C | 6.4.2 Business | | | |
| C | 6.4.3 Personal | | | |
| C | 6.4.4 School | | | |
| C | 6.4.5 Shopping | | | |
| C | 6.4.6 Social-Recreation | | | |
| A | 6.4.7 Other | | | |
| A | 6.4.8 Total | | | |
| | 6.5 Daily Travel Time per Tripmaker | | | |
| D | 6.5.0 Walking | | | |
| C | 6.5.1 Auto Driver | | | |
| C | 6.5.2 Auto Passenger | | | |
| C | 6.5.3 Motorcycle Driver | | | |
| C | 6.5.4 Motorcycle Passenger | | | |
| C | 6.5.5 Public Transport Passenger | | | |
| C | 6.5.6 Mixed Modes, Private & Public | | | |
| C | 6.5.7 Commercial Vehicle Driver | | | |

Cont'd.

Form 75-1 [illegible]

City .....

Country .....

| | | Base Year..... | Intermediate Year..... | Design Year..... |
|---|---|---|---|---|
| 6.6 | Average Internal Trip | | | |
| 6.6.0 | Walking: Distance | | | |
| 6.6.1 | Auto Driver: Distance | | | |
| 6.6.2 | Auto Driver: Time | | | |
| 6.6.3 | M/C Driver: Distance | | | |
| 6.6.4 | M/C Driver: Time | | | |
| 6.6.5 | P/T Passenger: Distance | | | |
| 6.6.6 | P/T Passenger: Time | | | |
| 6.6.7 | C/V Driver : Distance | | | |
| 6.6.8 | C/V Driver : Time | | | |
| 6.7 | External Travel Crossing the Cordon | | | |
| 6.7.0 | Auto : Vehicle Trips | | | |
| 6.7.1 | Auto . Person Trips | | | |
| 6.7.2 | M/C : Vehicle Trips | | | |
| 6.7.3 | M/C : Person Trips | | | |
| 6.7.4 | P/T : Person Trips | | | |
| 6.7.5 | C/V : Vehicle Trips | | | |

F 7-2

# DETAILED TABLES

for the presentation of Comprehensive Transportation Studies to the IBRD

City SURABAYA.

Country INDONESIA.

## 1. The Study Area

### 1.0 Maps showing

A 1.0.0 The Region and the Study Area
A 1.0.1 Physical barriers and special geographical features
A 1.0.2 Urbanized Area
1.0.3 Traffic Zones
A 1.0.4 Aggregation of Zones into Districts and Sectors
A 1.0.5 Screen Lines

### 1.1 Tables Summarizing

B 1.1.0 Ground Area of Zones
B 1.1.1 Ground Area of Districts
B 1.1.2 Ground Area of Urbanized Area

### 1.2 Land Use Patterns

A 1.2.0 Proportions of developed and undeveloped land
D 1.2.1 Land Use Categories - ground area and floor space
D 1.2.2 Employment by Land Use Categories
D 1.2.3 Special facilities, such as port, airport and heavy industry

} will be categorized but not at this level of detail.

## 2. Socio-economic Characteristics of Population

A 2.0 Population: Number, distribution ~~and characteristics~~
A 2.1 Households: Number, distribution ~~and characteristics~~
A 2.2 Labor Force
D 2.3 Household Income, Disposable Income and Expenditure on Travel, by mode
B 2.4 Student and School Enrollment
B 2.5 Motor Vehicle Ownership: Household distribution by vehicle availability ~~vs. income~~

## 3. Transportation System Supply Characteristics

### 3.0 Basic Infrastructure

A 3.0.0 Road Length, by Class
A 3.0.1 Operational Lane Length, by Class
A 3.0.2 Proportions of one-way roads
A 3.0.3 Travel Speeds, by Road Class
A 3.0.4 Daily and hourly Traffic Flows at Screen Lines, person and vehicle, by vehicle type

See Explanations on the other side of the Form

Cont'd.

A 3.0.5 Performance Indices, by Road Class
A 3.0.6 Accessibility Indices for private and public modes
D 3.0.7* Speed-Flow Relationships, by Road Class
A 3.0.8 Parking, street and off-street, and fares
A 3.0.9 Traffic Signal system

3.1 Public Transport System

A 3.1.0* Fleet, by Vehicle Type
A 3.1.1 Line Length, by Vehicle Type
A 3.1.2 Vehicle Trips and Kilometrage, by Type
A 3.1.3* Seat Capacity, by Type
A 3.1.4 Commercial Speeds, by Type
A 3.1.5* Performance Indices, by Type
A 3.1.6 Transportation Terminals
A 3.1.7 Fares

3.2 Private Transport System

A 3.2.0* Vehicles, by Type
A 3.2.1* Motorization, Household and Population, by Type (only vehicles)

3.3 Commercial Transport System

A 3.3.0* Vehicles, by Type
A 3.3.1 Transportation Terminals

4. Travel Demand Characteristics

4.0 Household Travel

C 4.0.0 Tripmakers per Household vs. Size, Income and Vehicle Availability
C 4.0.1 Trip Rates of Households and Tripmakers, by Mode, vs. Size, Income and Vehicle Availability
C 4.0.2 Travel Distance, Travel Time and Travel Cost Budgets vs. Size, Income and Vehicle Availability

4.1 Person Travel

C 4.1.0 Number of Trips, by Mode and Purpose
AC 4.1.1 Trip Rate, Trip Time and Trip Distance per Tripmaker by Mode and Purpose ~~vs. Income and Vehicle Availability~~
A 4.1.2 Modal Split Relationships
AC 4.1.3* Trip Time and Trip Distance Frequency Distributions, by Mode and Purpose

4.2 Private Vehicle Travel

A 4.2.0 Number of Trips and Trip Rates, by Type
B 4.2.1 Average Trip Time and Trip Distance, by Type
B 4.2.2 Daily Travel Distance and Travel Time per Vehicle, by Type
A 4.2.3 Vehicle Occupancy Rates, by Type and Purpose
A 4.2.4* Trip Time and Trip Distance Frequency Distributions, by Mode and Purpose

Cont'd.

A 4.2.[illegible] Operating Costs, by Type and Speed

4.3 Commercial Vehicle Travel

A 4.3.0 Number of Trips, by Type
A 4.3.1 Trip Rates, by Type
A 4.3.2 Operating Costs, by Type and Speed

4.4 External Travel

A 4.4.0 Daily and Hourly Number of Person and Vehicle Trips, ~~by Internal and External Residents~~ crossing the Cordon Line, by Mode and Purpose

4.5 Trip Generation, Attraction and Distribution

A 4.5.0 Trip Generation and Attraction equations, by Mode and Purpose, Internal ~~and External~~
A 4.5.1 Origin and Destination Matrices, Person and Vehicle, by Mode and Purpose

4.6 Trip Assignment

A 4.6.0 Daily Person and Vehicle Assigned Kilometrage, Hours of Travel and Speed by Road Class, Mode and District

Peak to Daily flow conversion

Research - General

Mr. John Blaxall, P & B

April 5, 1976

Benjamin B. King, VPD

Research Budget 10% Carryover Provision

This is to confirm our mutual understanding that up to 10% of the FY76 research budget (i.e., up to $214,300) may be brought forward to FY77. Please let us know how this is to be handled, so that we may inform project supervisors.

cc: Mr. J. Adler
Mrs. Feldstein

OFGrimes:gm

Research gen

Mr. C. Weiss, PAS

April 5, 1976

Benjamin B. King, VPD [redacted]

Proposal for a Study of the Food Delivery System
(University of Pittsburgh)

1. A copy of this arrived on my desk with a routing slip dated April 1 and no other information. What am I supposed to deduce?

2. Are you advocating this proposal? If so, there are several serious questions about it:

(i) It is an external proposal which shows no signs of having been discussed with the Bank and, a fortiori, been adapted to our needs.

(ii) It is to be conducted by a wholly US team (mainly systems engineers).

(iii) The prototype is envisaged in a US context. This does not seem the shortest (or cheapest) route to applicability in the LDC's.

(iv) It costs $370,000, of which one-third is "indirect". This is without computer time which at Pittsburgh seems to be a free good.

3. I have another question about research projects which bear on agricultural investment, production and delivery to the consumer. When are the considerable sums devoted by CGIAR to biological research going to be at least fractionally allocated to closely allied problems?

4. I suggest that it would be as well, before proceeding further, to obtain copies of the Philippine and South India studies mentioned by the proposers (bottom of page A-15) to see what they are like; if they are at all encouraging, then you might consult those in the Bank who could give advice on the suitability and adaptability of this proposal:

(i) Agriculture Department.

(ii) DRC (cf. RP 671-29).

(iii) Economic Analysis and Projections Department (Jean Waelbroeck).

(iv) Employment & Rural Development Division, DED.

cc: Messrs. Bruce
Duloy
Grimes
Leiserson
Waelbroeck

BBKing:gm

Research - General

Mr. R. Gulhati, ECDDR April 5, 1976

Benjamin B. King, VPD Signed B. B. King

Research on Self-Management

Having read Timothy King's memo of April 1, I conclude that we could use more self-management of self-management research. It is now time to put up or shut up.

cc: Messrs. Chenery, Karaosmanoglu, Avramovic, Duloy, Grimes, T. King, Little

BBKing:gm

Research - General

Those listed below

April 2, 1976

Orville F. Grimes, Jr., VPD

Schedule of Forthcoming Research Committee Meetings

The next two meetings of the Research Committee will take place on Tuesday, May 11 and Thursday, June 17. Consequently, proposals in final form should reach me no later than Thursday, April 15 for the May meeting and Thursday, May 20 for the June meeting. Dates for subsequent meetings remain at present the same as outlined earlier -- late July/early August and late August/early September. I will let you know of any changes in this schedule.

Distribution

Messrs. Chenery, Karaosmanoglu, B. B. King
Avramovic, Balassa, Lerdau, Thalwitz, Vergin,
Waelbroeck
DPS, CPS Directors and Division Chiefs
Regional Chief Economists
Miss Gary
Mr. Lowther
Mrs. Hazzah

OFGrimes:gm

Research - General

Division Chiefs, DPS, Mr. Haq,
Directors, CPS, Regional Chief Economists

April 1, 1976

Orville F. Grimes, Jr., VPD

New Research Proposals in FY77

1. To gain a fuller appreciation of anticipated demands on the research budget during FY77, I would be grateful if you could list on the attached sheet the new research projects you expect to submit to the Research Committee over the next few months. Coverage should range from proposals well along toward completion, a draft of which is expected soon, to ideas taking preliminary shape whose budget estimates must necessarily be highly notional. Intentions matter more at this point than their precision in becoming reality.

2. Please give an estimate of the month in which proposals are likely to be (a) available in semi-final form for an early and informal discussion with a review panel, and (b) ready with all necessary signatures for review prior to consideration by the Research Committee. Early reviews have been helpful in sharpening the focus and relevance of some recent proposals, suggesting that wider use could be made of these informal sessions.

3. I would appreciate receiving the completed sheet by Friday, April 23. Thank you.

Attachment

cc: Directors, DPS
Admin. Assistants, CPS
Mr. Lowther
Miss Gary

OFGrimes:gm OG

Proposals Expected to be Submitted to
Research Committee for Funding, FY77

Department:

Division:

| Tentative Project Title | Anticipated Request for External Research Funds FY77 | FY78 | Total[1] | Likely Submission Dates of Proposal Semi-Final | Final[2] |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

1/ Including FY79 if applicable
2/ Best estimate of month, May to October 1976

Research Gen

Mr. J. Duloy, DRCDR March 31, 1976

Benjamin B. King, VPD Signed B. B. King

"A Model for Estimating the Effects of Credit Pricing on Farm Level Employment and Income Distribution"

1. I have no doubt that this should become a Working Paper, but I think its value would be greatly enhanced, if, as I said, it answered the question: what is going on? I see the inputs (dimly) and I see the outputs (though the glare is overpowering), but en route?

2. To try my hand at answering this question, I made four similar diagrams, all based on Table 10 (page 27). The first of these is on land-use. The top diamond shows the changes which occur with a profit maximand, as one goes along two alternative routes from low-wage, high-interest to high-wage, low-interest (the coordinates are in parentheses). The dotted vertical lines show what happens when you go, at the two extremes, from a profit to a profit-cum-wage (shareholders) maximand. The bottom diamond corresponds to the top one.

3. In any given diamond, one observes two patterns of change, which I will call opposite or parallel. The first occurs along two legs, starting or finishing at the same point. A typical case is either the cotton/soya shift or the sugar beet/soya shift at the top of the land-use diagram. This sort of change implies that relative factor-prices are important. The second pattern occurs when a change is seen on parallel sides of the diamond; a case in point is the sugar beet/soya shift in the lower land-use diamond. This implies that absolute prices (labor here) are important. There are also some mixed cases. The table at the end of this note (before the diagrams) gives a list. Some are common to both maximands; some are not (for example, shareholders' employment).

4. In some cases, the reasons are fairly obvious. For example, the characteristic behavior of profits and shareholders' wages in diagram 3 depends on whether you are increasing wages or reducing interest rates. It seems fairly independent of the cropping pattern. But that, as they say in Kansas City, is about as far as I can go apart from idle speculation. I suspect that one should first explain what is going on within a diamond (or set of them with the same maximand). Then there might, with luck, be a link to the reasons for differences between maximands.

5. Any non-glare illumination?

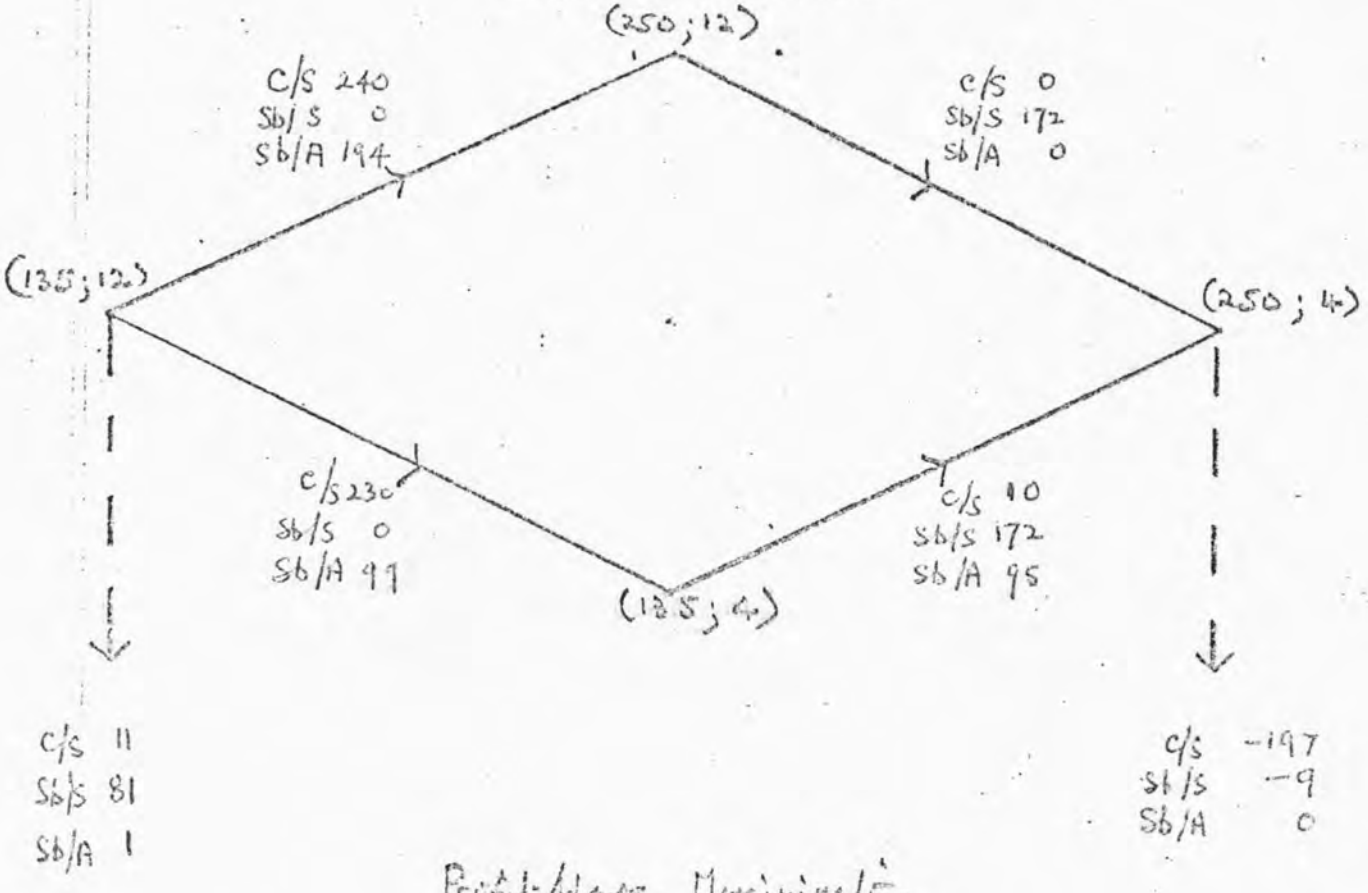
cc: Mr. Norton
Attachments
BBKing:gm

## Characteristics of the diagrams

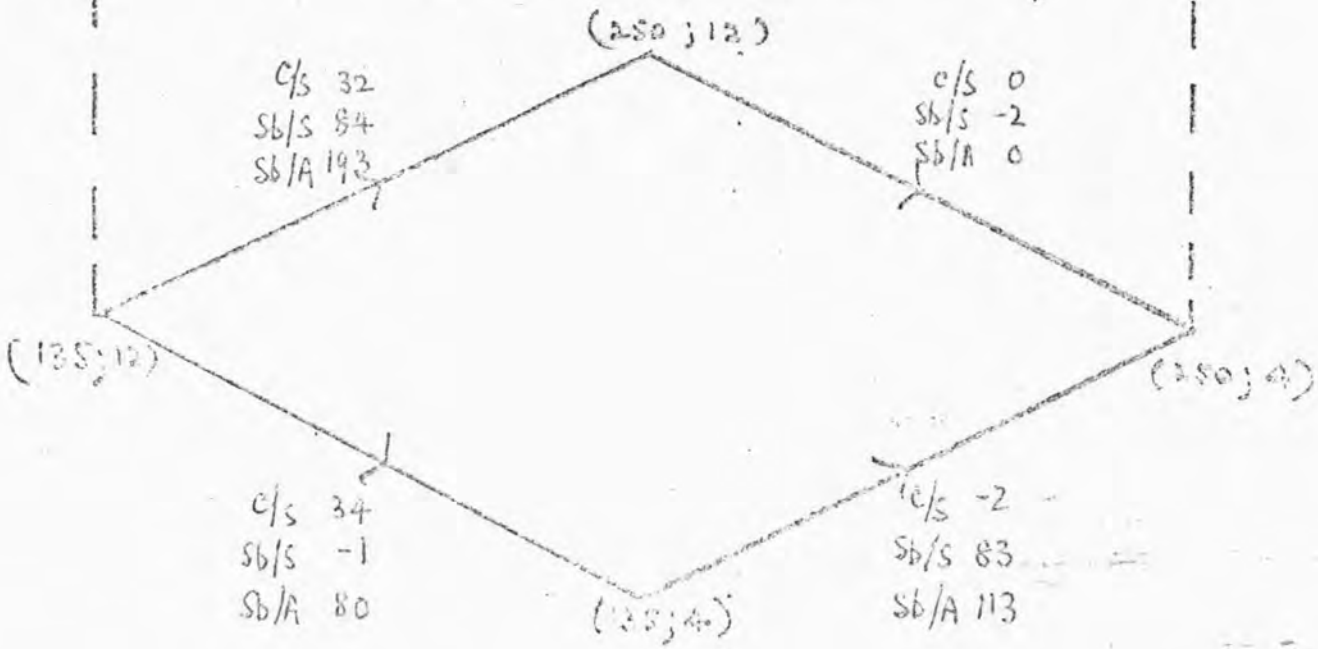
| | Opposite | Mixed | Parallel |
|---|---|---|---|
| **Profit Maximization** | | | |
| Land use | C/S, Sb/S | Sb/A | - |
| Employment | N | - | S |
| Income | - | N | P,S |
| Tractor Ut. | T110 | T65 | - |
| **P/W Maximization** | | | |
| Land use | C/S | Sb/A | Sb/S |
| Employment | S | N | - |
| Income | - | N | P,S |
| Tractor Ut. | T110 | T65 | - |

1. Land use (ha.)

## Profit Maximization




## Profit/Hope Maximization

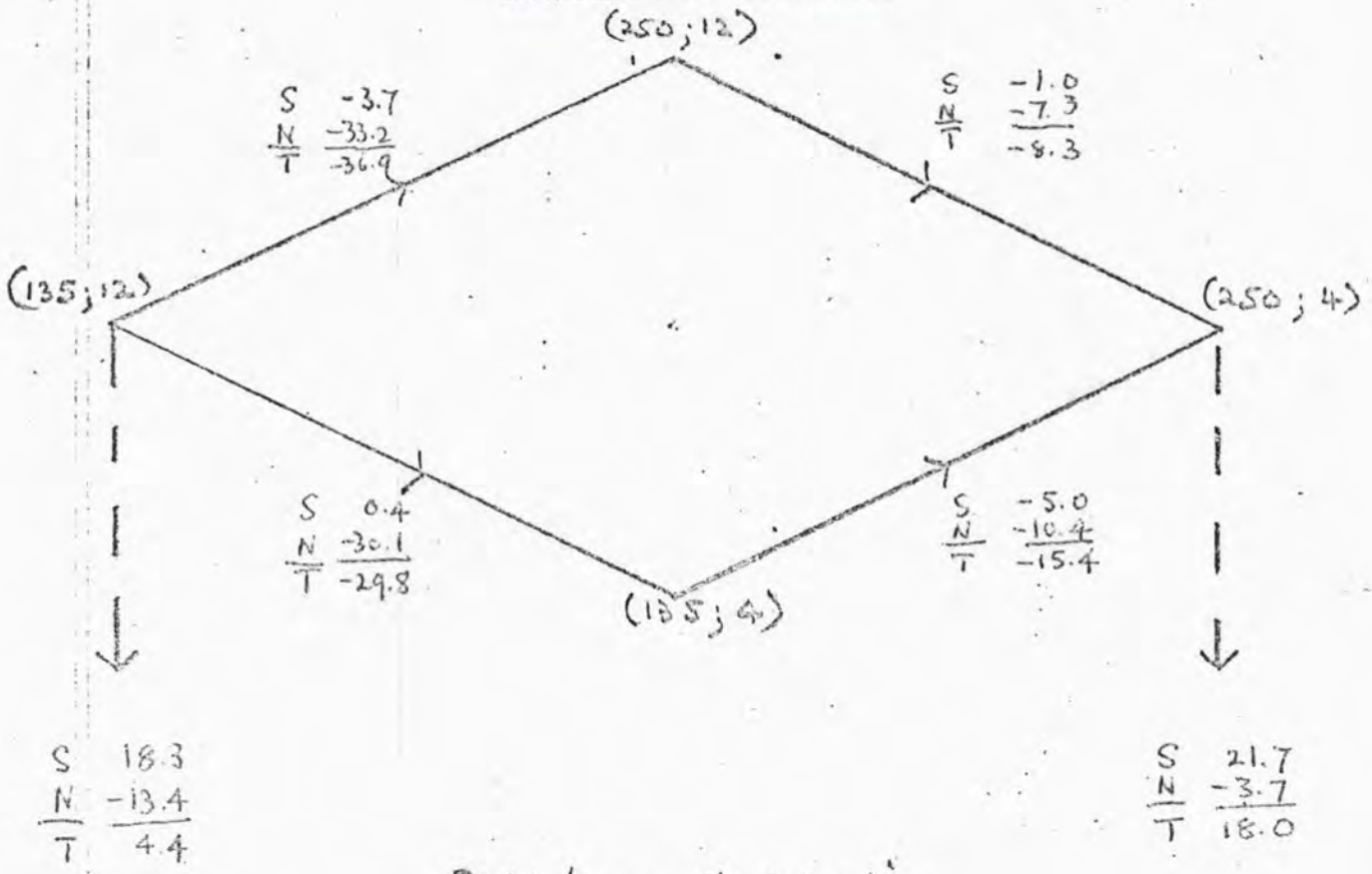



Key

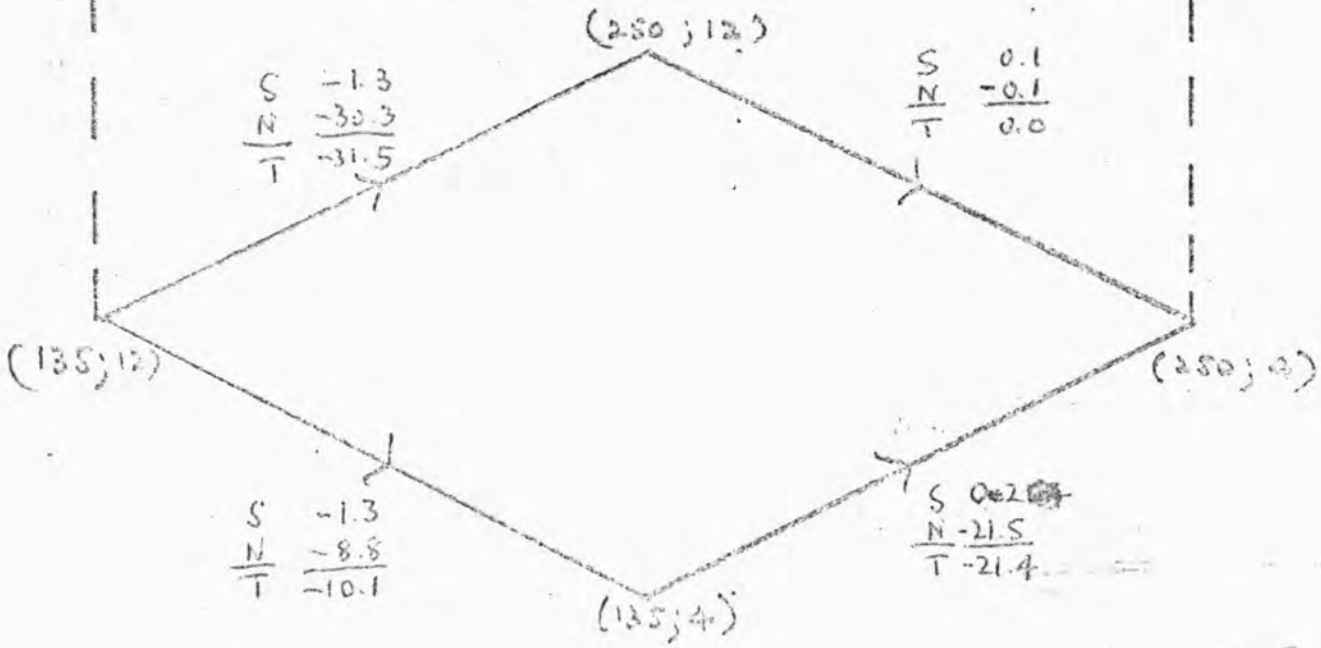
| | |
|---|---|
| C/S | Cotton to Soya |
| Sb/S | Sugarbeet to Soya |
| Sb/A | Sugarbeet to Alfalfa |

2. Employment (Th m/da

## Profit Maximization



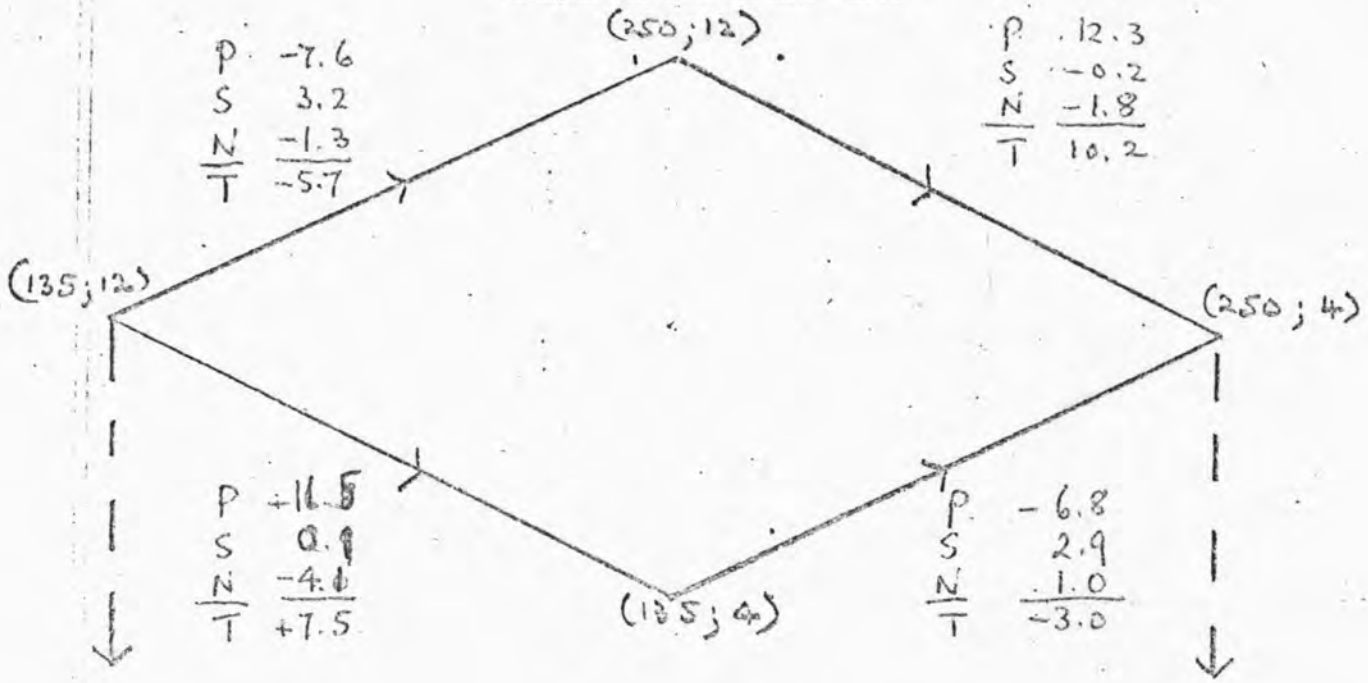

## Profit-Wage Maximization




Key

S Shareholders
N Non-shareholders
T Total.

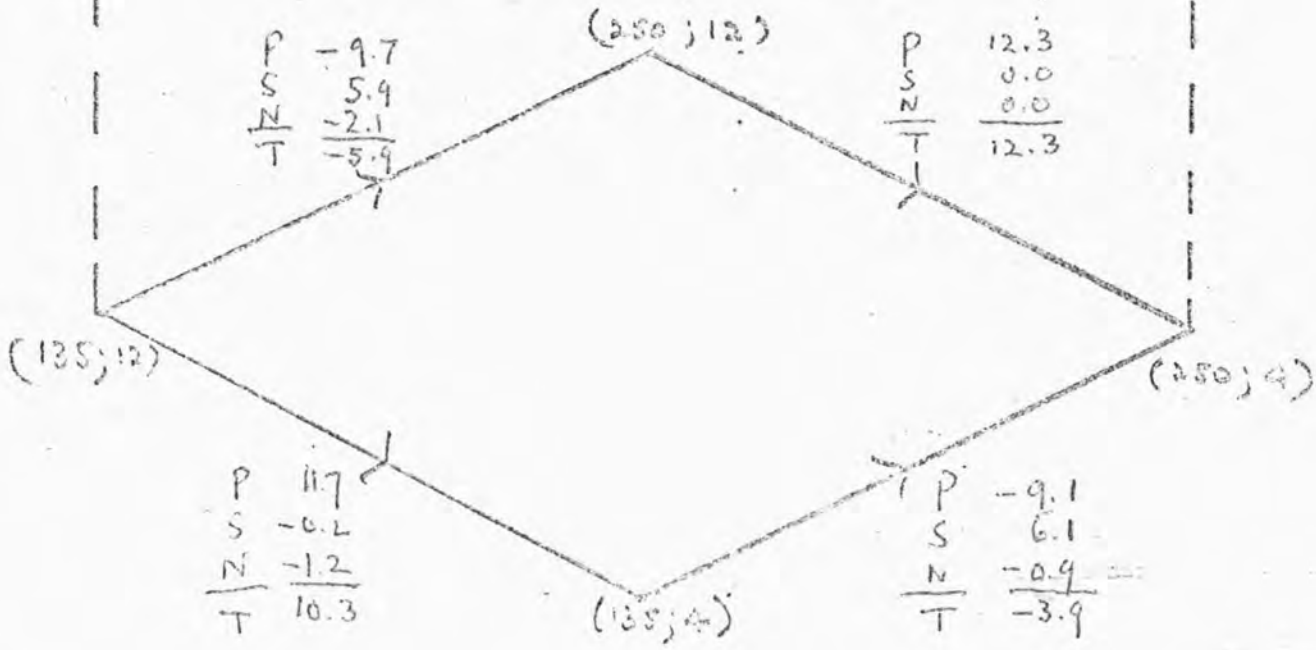
## Profit Maximization




P -1.4
S 2.5
N -1.9
T -0.9

P -3.5
S 5.4
N -0.9
T 1.0

## Profit/Wage Maximization

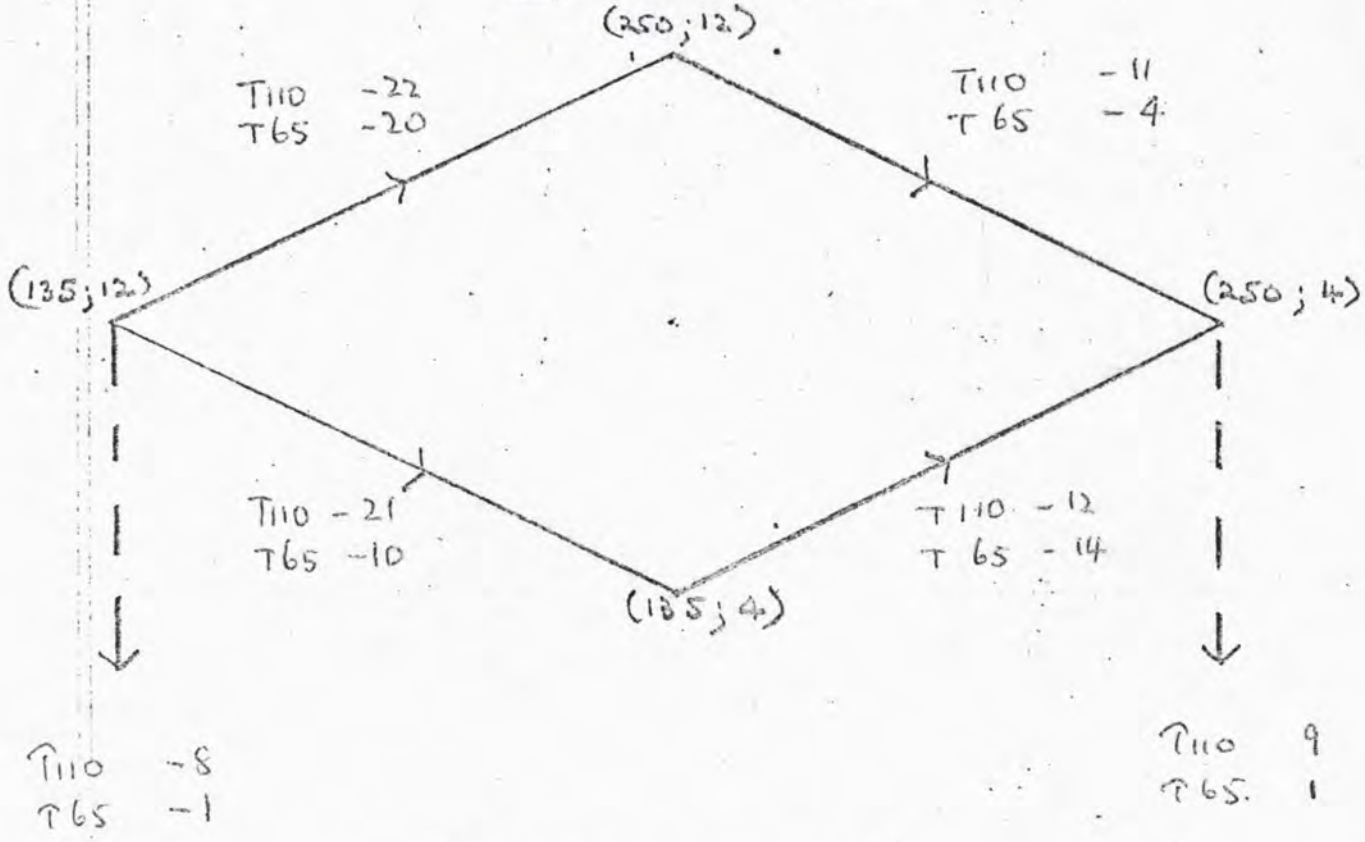



Key

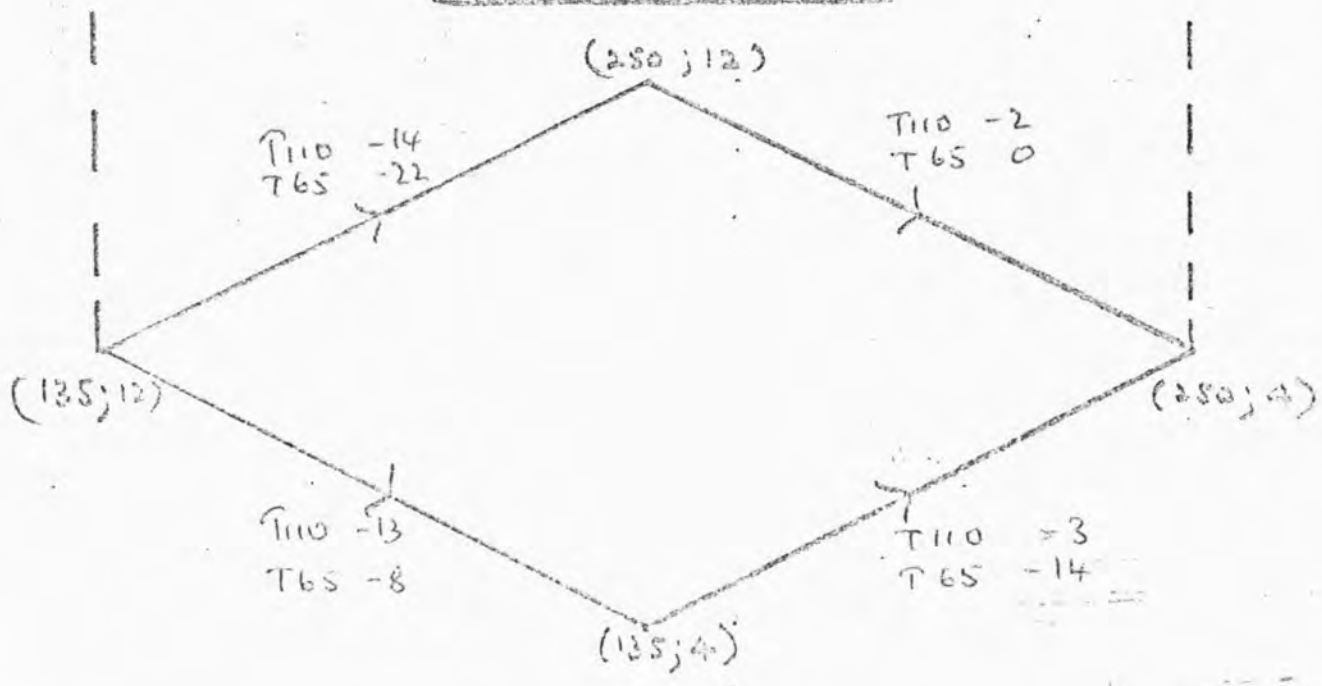
P Profits
S Shareholders' wages
N Non-shareholders' wages
T Total

4. Tractor Utilization (%)

## Profit Maximization




## Profit/Wage Maximization




Key

T110 110 hp tractors
T65 65 hp tractors

Research General

Messrs. J Holsen & J. Shilling March 29, 1976

Benjamin B. King, VPD Signed B. B. King

Prospects: Country Groups

1. There can be two reasons for projecting forward to 1985:

(a) To see what it takes to get there.
(b) To see where we stand when it arrives.

I think the choice of country groups for the post-adjustment period should be decided, not on the basis of compatibility at the beginning, but on the basis of compatibility at the end.

2. IDA resources are scarce and Bank resources will become so. Who will be eligible for Bank money? Who will be on the edge (blend, third window, etc.)? Who will be IDA only? Among the latter, should there be a division into IDA-for-suitable-projects and a new sort of budget-support category for countries in chronic need? It's no use looking at the beginning of the period for this.

3. In the context of prospects for DC's, this may sound egocentric (the ego being the Bank). But, I think it helps to focus on the problems of development if one first addresses one's own concerns vis-a-vis these problems on a grander scale.

4. I have consequently gone to the very end of the limb in drawing up a 1985 list of categories (see Table I). It is very off-the-cuff and is there to be shot at. It is not all that different from the Shilling list of January 15. (Perhaps we are all brainwashed by the same soap). But there are some differences, especially in making explicit the reason for grouping.

5. I should perhaps add a few terminological explanations. Graduates and Graduating are those countries which would no longer be getting Bank loans or would be expected to stop within the next 5 to 10 years after 1985[1/]. Through the looking glass countries are those that have to run fast to stay put.

6. Could we discuss?

1/ A list of countries already in these categories is in Table II. It might be interesting to have dates of last loans attached to these, if it can be done easily.

Attachments
cc: Messrs. Karaosmanoglu, Tims, Waelbroeck
BBKing:gm

## I. 1985 Categories

A. Graduates

Portugal, Romania, Yugoslavia
Brazil, Jamaica, Mexico
Algeria

B. Graduating fairly soon

Turkey
Korea, Malaysia

C. Stagnant South America

Argentina, Chile, Uruguay

D. Large, Poor OPEC

Indonesia, Nigeria

E. Typical Bank (besides C, D & some of F)

Central America (most)
Colombia, Ecuador, Paraguay, Peru
Morocco, Tunisia
Ivory Coast, Liberia, Zambia
Philippines, Thailand

F. OPEC-support cases (?)

Egypt, Jordan, Syria

G. Some concessionary aid

Bolivia
Cameroon, Ghana, Kenya, Liberia, Senegal, Zaire

H. Concessionary only with some growth

Burma, India, Pakistan, Sri Lanka, Viet-nam
C.A.R., Ethiopia, Malawi, Tanzania

I. "Through the Looking-glass" cases

Bangladesh
Afghanistan, Nepal
Laos, Cambodia
Sahelian countries, Sudan

## II. Current Graduates and Graduating

A. Western Europe

Denmark, France, Luxemburg, Netherlands

B. Northern, Central Europe, Oceania, etc.

Finland, Iceland, Norway
Austria, Italy
Australia, Japan, South Africa

C. OPEC

Iran, Iraq, Libya, Venezuela

C. Mediterranean, Far East

Greece, Israel, Spain
Hong Kong, Singapore

Research General

Mr. Ravi Gulhati, Director, ECD

March 29, 1976

Benjamin B. King, VPD

Signed B. B. King

City Study

At the Research Committee meeting of March 25 Mr. Chenery said that interested Bank staff, having discussed the most recent version of this proposal on March 23 with Messrs. Keare, Renaud and Rothenberg, were sufficiently encouraged to ask for a redrafted proposal that sets down more clearly what is to be undertaken and, more particularly, what methods will be used. The work envisaged does seem to fit logically into the framework for Bank urban research, a revised draft of which is now being prepared. Mr. Chenery's feelings on the concept of such a study, he reported, had evolved from essentially negative to neutral or slightly positive.

cc: Messrs. Little
Keare
Renaud

Research - General

Mr. Ravi Gulhati, Director, ECD
Mr. K. Kanagaratnam, Director, PNP

March 29, 1976

Benjamin B. King, VPD

Research Proposal: International Review Group on Research in Population and Development

1. At its meeting of March 25 the Research Committee agreed with the findings of the review panel that although issues in population research are of interest to the Bank, this proposal, when judged according to the standards normally applied to Bank research proposals, seems unable adequately to address these issues. Recognizing, however, that a review of the proposal on its merits may not be a determining factor in this case, the Committee decided to report its conclusions to Mr. McNamara, who as you know had earlier indicated agreement that the work should be undertaken and, if so, that it should be financed from the Research budget. Mr. Chenery will send a memorandum to Mr. McNamara outlining the Committee's findings and suggesting what possible further action might be taken if it is decided on other than technical grounds that the Bank should make a contribution.

cc: Messrs. Little
T. King
Zachariah
Baldwin
A. Ray

OFGrimes:gm OG

Research General

Research Committee Members

March 26, 1976

Orville F. Grimes, Jr., VPD

Minutes of Meeting of March 25, 1976

1. Present at the meeting were Messrs. Chenery (Chairman), Avramovic, Dubey, Jaycox, B. B. King, Lerdau, Thalwitz, van der Tak, Waelbroeck and Grimes.

International Review Group on Social Science Research in Population and Development

2. The Committee unanimously agreed with the review panel that although issues in population research are of interest to the Bank, this proposal, when judged according to the standards routinely applied to Bank research proposals, seems incapable adequately of addressing these issues. It felt that support of a research program whose methodology, objectives and usefulness to ultimate users were, according to a technical review by Bank staff, found wanting could set an unfortunate precedent. Recognizing, however, that such a technical review may not be a ruling factor in this case, members decided to report these conclusions to Mr. McNamara, who had earlier indicated agreement that the work should be undertaken and, if so, that it should be financed from the Research budget. Mr. Chenery will send a memorandum to Mr. McNamara outlining the Committee's findings and suggesting what possible further action might be taken if it is decided on other than technical grounds that the Bank should make a contribution.

Evaluation of Asian Data on Income Distribution (Project No. 671-08)

3. The Committee noted that Phase 2 of this project, and eventually Phase 3, should help identify major characteristics of poverty groups in a broad cross-country framework and, together with companion research on income distribution in Latin America, lead to policy-oriented results. It accordingly approved the work program planned for Phase 2, authorizing an additional $94,400 ($74,400 in FY77 and $20,000 in FY78). Phase 3 will be the subject of a separate submission to the Committee at a later date.

Optimality of Tax-Subsidy Intervention

4. This proposal was received too late for review. Questions arose of principle -- the proposal would cost so little that funding by the sponsoring department might be

more appropriate -- and of execution, particularly whether the DRC had adequate staff to manage additional research in this area. Given, in addition, the links between this proposal and that on agricultural prices and subsidies forthcoming from CPS in support of a Policy Paper on the same subject, the Committee recommended that an ad hoc group under Mr. van der Tak examine how the proposal's objectives and methodology relate to those of the CPS effort in research and policy. This group will report its findings to the Committee.

Urban Research

5. Under other business, Mr. Chenery reported on the progress of the Stoutjesdijk paper outlining a framework for Bank urban research, and of the "City Study" (see "Strategic Planning to Accommodate Rapid Growth in LDC Cities," included with materials for the February 13 meeting of the Committee). Although the objectives and, more particularly, the methodology of the "City Study" need to be set down more clearly, the work envisaged does seem to fit logically into the framework for urban research, a revised draft of which will shortly be available. A group of interested Bank staff, discussing the most recent version of the proposal on March 23 with Messrs. Keare and Renaud and the major consultant (Professor Rothenberg), was sufficiently encouraged to ask for a redrafted proposal spelling out more clearly what is to be undertaken and what methods will be used. Mr. Chenery's feelings on the concept of such a study, he reported, had evolved from essentially negative to neutral or slightly positive. The redrafted proposal could be considered at the next meeting of the Committee so that, if approved, a research team could be assembled before its members are obliged to accept other commitments.

Distribution

Messrs. Chenery, Avramovic, Balassa, B. de Vries, Dubey, Jaycox, B. B. King, Lerdau, Thalwitz, van der Tak, Vergin, Waelbroeck, Yudelman
Ms. Weaving
Mrs. Hazzah

OFGrimes:gm

Research gen

Mr. Yacov Zahavi, TRU

March 25, 1976

Orville F. Grimes, Jr., VPD

Draft Working Paper

1. As we discussed, additional points of style need to be clarified before this paper can be considered for inclusion in the Staff Working Paper series. These points are concerned with (a) presentation of data; (b) interpretation of data; (c) textual clarifications; (d) minor stylistic improvements; and (e) typographical errors.

Presentation of Data

2. To avoid confusion and misinterpretations, the tables should be more self-contained. Many of the headings are incomplete. A reader cannot be expected to know for certain that "L, km." in Table 2.1 means "length of arterials, km." unless it is spelled out for him. In Figure 1.9 the list of 11 cities to which the figure refers has been omitted. Another illustration is your use of the term "split" or "modal split." In Table 3.1 a bit of cogitation yields the result that "public split" is the proportion of total transport accounted for by public modes, i.e., column 6 divided by column 8. An explicit reference, such as "6/8" with the columns numbered, would aid greatly in interpreting the table, all the more so as "rail split" turns out not to be columns 5 over 8 as one might expect, but 5 over 6. Table 3.1 is described on page 36 as presenting information on "car, including purchase, maintenance and operation." No such heading appears in the table. Does the heading "private" mean cars only; cars and motorcycles, or something else?

3. A slightly different problem besets Figure 3.3, page 39. Both horizontal scales appear to take on different unit lengths at various points. Observation suggests that if the scales were of uniform length, the linear relationship depicted in the graph would by no means be as clearly defined. On page 56, what are the six cities? Mentioning the cities with their populations would be helpful. It is likewise extremely difficult to make sense of Table 3.11; in what units are measured "mobility" and "perceived value of mobility?"

Interpretation of Data

4. The above difficulties are often compounded in the textual descriptions of what the data show. Most of these difficulties, as with Figure 1.1 where an explanation

is needed that the curves are additive vertically rather than each representing the indicated total, are easily dealt with. In Figure 1.12-2, why not say that "the motorcycle motorization is shown as a percentage of car motorization and plotted against the latter?" On page 20, can the shape of the curve also be explained by a lower rate of increase of demand for commercial vehicles with income and city size (resulting from narrower fluctuations in requirements for commercial activity) compared with the demand for private cars? In a similar vein, what Figure 2.2 (page 27) may show is the greater congestion at high motorization rates. Arterial density may fall both because there are more cars and because fewer kilometers of road are being built than the high motorization rates require.

5. The notion that a single transport mode, such as rail travel, has a modal split is, at best, confusing. By "rail modal-split" is meant the proportion of total expenditures devoted to rail travel (column 5 divided by column 6, Table 3.2, page 38) - why not call it that? Also in Table 3.2, the reader assumes, but is not told, that the expenditure figures are weekly and are denominated in pounds.

Textual Clarifications

6. Even though it is stated otherwise, the paper does examine a rather specific hypothesis: that it is possible to identify a statistical threshold that, once crossed, puts a developing country into the "developed" category. Depending on one's predilections this is either an interesting hypothesis to examine or a persistent myth in need of debunking. Either way, it is a major element of the paper and deserves a bit more emphasis in the introductory paragraphs.

7. Some broad statements about changes in population density and employment with urban growth are made in the final section, with little or no empirical support. I refer particularly to the statement (page 76) that population densities increase as cities grow over time, and (page 81) that differences between population densities and employment concentrations grow as one moves into the city center from the periphery. Such statements cry out for documentation or, at the least, qualification. It would also be helpful to have a more complete reference to the ongoing study of city structure and mobility mentioned on page 81.

8. The assumption of h = 1.2 hours used in Chapter 4 (page 76) undoubtedly stems from earlier findings outlined in Chapter 3, e.g., Table 3.6, page 50. If so, a cross-reference would be useful.

Minor Stylistic Improvements

9. Another potential source of confusion is the periods inserted in many equations (pages ix, 54 and 60, among others). Perhaps I am not familiar with this notation, but my reaction that something was amiss diverted my attention from the equations themselves.

10. You tend, on occasion, to attribute to your readers a greater familiarity with US and world geography than perhaps is warranted. What, for example, is "Tri-State?" (Appendix 5 and elsewhere). I could not guess whether "Springfield" refers to a city in Missouri, Illinois, Massachusetts, or another of the 25 states of the US with such a city. "Monroe," if I recall, is in Louisiana. These gymnastics can be eliminated by greater precision in tables comparing these cities, or perhaps a footnote to the first one mentioning the others.

Typographical Errors

11. The following typos caught my attention. Please review the text for others:

(p. 4) to a future date.
(p.34) first para.) components.
(p.40) where the proportion...decreases sharply with increases in motorization.
(p.44) scatter of points.
(p.56) "Figure 3.6" should be "Figure 3.16."
(p.63) temporally.
(p.66) it may be deduced...

OFGrimes:gm

Research Journal

Mr. T. King, ECDPH

March 25, 1976

Benjamin B. King, VPD Signed B. B. King

Handouts from H.I.I.D. Meeting

When Hollis and I went to a meeting at H.I.I.D. last month, I picked up among others the two attached handouts. The author of the first, Mark Rosenzweig (Boston University?), made a good presentation. Basically, the hypothesis he is testing is that the number of children and their school enrolment is determined rationally in that it is affected by the value of their potential employment and their mother's, on or off the family farm. The results for India are pretty good and for the Philippines not so good. Please show this one to Mark, if he's interested. not attached

Attachments

cc: Mr. Leiserson

BBKing:gm

Form No. 27
(3-70)

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

PPA - P09A77
Research General

# OUTGOING WIRE

TO: MR. RAJ KRISHNA
5 MALKA GANJ
DELHI 110007

DATE: MARCH 24, 1976

CLASS OF SERVICE: LT / Rs
(EXT. 5481)

COUNTRY: INDIA

TEXT:
Cable No.:

LETTER AND RESULTS ARRIVED STOP REQUESTING EXTENSION OF CONTRACT STOP BRIEF COMMENTS FOLLOW STOP FIRST WHAT IS DEFINITION OF RURAL STOP SECOND ARE TOWNS IN EXAMPLE TEN TO FIFTY THOUSAND RANGE OMITTED STOP IMPORTANT SINCE MUCH AGRO BASED INDUSTRY COMMERCE AND SERVICES OFFER DECENTRALISED/LOCALISED NONFARM EMPLOYMENT OPPORTUNITIES IN SUCH TOWNS COMMA WHICH ARE MANY IN NUMBER STOP IN MUDA PROJECT AND OTHER COUNTRIES TRUE EVEN OF TOWNS OF HUNDRED THOUSAND STOP THIRD DO DATA ALSO GIVE INFORMATION ON VALUE ADDED AND LABOR INTENSITY OF NONFARM ACTIVITIES STOP FOURTH TWO DIGIT LEVEL GIVE INTERESTING INSIGHTS INTO BACKWARD LINKAGES FROM AGRICULTURE STOP IS IT POSSIBLE THROUGH EXAMPLE BROAD REGIONAL CROSS-SECTION ANALYSIS TO EXAMINE DEVELOPMENT OF NONFARM EMPLOYMENT IN RELATION TO DEVELOPMENT OF FARM INCOMES AND OUTPUTS STOP BELIEVE MAIN SOURCE OF DEVELOPMENT OF NONFARM EMPLOYMENT IS THROUGH BACKWARD AND FORWARD LINKAGES WITH AGRICULTURE GENERATING DEMANDS FOR NONFARM ACTIVITIES AND EMPLOYMENT STOP THAT IS LESS EMPHASIS NEEDED ON DECENTRALISATION PER SE THAN ON LOCALISED DEVELOPMENT STOP THIS IN TURN GENERATES DEMANDS FOR AND

(continued on page 2)

**NOT TO BE TRANSMITTED**

AUTHORIZED BY:

NAME: M. W. Leiserson

DEPT.: Development Economics

SIGNATURE: D.A for M. Leiserson.
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: DA:krt

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

For Use By Communications Section

Checked for Dispatch: _____

Form No. 27
(3-70)

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

# OUTGOING WIRE

TO: MR. RAJ KRISHNA
5 MALKA GANJ
DELHI 110007

DATE: MARCH 24, 1976

CLASS OF SERVICE: LT
(EXT.5481)

COUNTRY: INDIA

TEXT:
Cable No.:

(Continued from Page 1)

ECONOMICALLY JUSTIFIES WORKS ELECTRIFICATION ROADS CONSTRUCTION CREDIT AND SMALL INDUSTRY EXTENSION AND TRAINING ETC STOP FIFTH TABLES ONE TO SIX INFORMATIVE STOP CONTRAST WITH URBAN DATA SAY AT ONE DIGIT WOULD ALSO BE INFORMATIVE STOP SIXTH BOOK BY DESAI AND BAICHWAL MAY INTEREST YOU ON NONFARM EMPLOYMENT IN THANA DISTRICT IT GIVES ADDITIONAL INSIGHT INTO PRIMARY AND SECONDARY WORK BY MALES AND FEMALES PUBLISHED BY ICAR IN 1969 STOP WILL WRITE STOP THANKS AND REGARDS

ANDERSON
INTBAFRAD

**NOT TO BE TRANSMITTED**

AUTHORIZED BY:

NAME M. W. Leiserson

DEPT. Development Economics

SIGNATURE D. Anderson for M. Leiserson
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: DA DA:krt

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

For Use By Communications Section

Checked for Dispatch:

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE CORPORATION

# OUTGOING WIRE

TO: MR. RAJ KRISHNA
5 MALKA GANJ
DELHI 110007

DATE: MARCH 26, 1976

CLASS OF SERVICE: LT (EXT.5481)

COUNTRY: INDIA

TEXT:
Cable No.:

(Continued from Page 1)

ECONOMICALLY JUSTIFIES WORK SIMPLIFICATION ROADS CONSTRUCTION CREDIT AND SMALL INDUSTRY EXTENSION AND TRAINING ETC STOP WITH TERMS ONE TO SIX INFORMATIVE STOP CONTRACT WITH URGAN DATA SAY AT ONE BIGIT WOULD ALSO BE INFORMATIVE STOP SIXTH MOON BY BRAAI AND RAJGUNDAL MAY INTEREST YOU ON MORNING RETIREMENT IN TAMIL DISTRICT IT GIVES ADDITIONAL INSIGHT INTO PRIMARY AND SECONDARY WORK BY MALES AND FEMALES INFLUENCED BY LOAN IN 1969 STOP WILL WRITE BYE THANKS AND REGARDS

ADDESON
INTERFAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: M. W. Leighton

DEPT.: Development Economics

SIGNATURE: (SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: DA:

ORIGINAL (File Copy)

(IMPORTANT: See Secretary Guide for preparing form)

CLEARANCE AND COPY DISTRIBUTION

COMMUNICATIONS

MAR 24 P 3:34 1976

DISPATCHED

For Use By Communications Section

Checked for Dispatch

Research General

Ms. Rachel Weaving

March 23, 1976

Benjamin B. King Signed B. B. King

Working Papers

1. Four suggestions have been made about Working Papers, all or some of which might be introduced simultaneously once the details have been worked out:

(a) Have a reference to the World Bank Catalog included (for outsiders). (Waelbroeck).

(b) List the last 10, 20 or whatever titles on the same page as (a). (Churchill).

(c) Say something about copyright. (Winterbottom).

(d) Change the color. (Merriam).

2. The first (a) makes a lot of sense and is easy. (b) needs some sort of mechanism to make it easy; perhaps you could discuss with Geri. Maybe the logical list would be all since the last catalog.

3. Winterbottom is supposed to be working on (c); how far has he got? Same for (d).

cc: Mr. Grimes

BBKing:gm

Research General

Mr. H. Janssen, EDS

March 19, 1976

Benjamin B. King, VPD Signed B. B. King

Bibliography on Foreign Aid

1. We have prepared the attached preliminary list of literature on the experience of aid. As you will see, it is very long and, consequently, I would like your advice on how it might be shortened in order to respond to your question. Perhaps, after you have had a chance to look it over, we could have a short meeting.

2. The list is arranged in three parts: 1) general, 2) particular recipients (countries or regions), 3) particular donors or facilities. Broadly, it covers the following topics:

- the impact of aid on recipient countries.
- whether there is a need for aid, and what sorts of aid.
- aid administration, aid organizations and facilities, and their experiences.
- relations between donors and recipients of aid.
- discussions about future needs, directions and appropriate forms of aid.

3. The aid literature is voluminous. Even this list is far from being all-inclusive. Nothing published before 1968 is included, and it is less representative for the years 1968-71 than for 1971-75. Moreover, the list does not include any documents put out by the Bank as a result of the evaluation of Bank projects.

Attachment

cc: Messrs. Knetschke
Chenery

BBKing:RWeaving:gm

## 1: General

Abbott, G.C.
"Aid and Indebtedness - A Proposal"
National Westminster Bank Quarterly Review
May 1972, pp. 55-67.

Abbott, G.C.
"The Double-Bind of Oil and Aid - A Way Out"
Banca Nazionale del Lavoro Quarterly Review
September 1974, (110) pp. 227-42.

Abbott, G.C.
"Two Concepts of Foreign Aid"
World Development
September 1973, 1(9) pp. 1-10.

Abi-Saab, G.
"La Conferenza del UNCTAD: problemi e loro importanza" (English summary)
Il Risparmio
February 1969, 17(2) pp. 197-230.

Adams, D.W.
"Agricultural Credit in Latin America: A Critical Review of External Funding Policy"
American Journal of Agricultural Economics
May 1971, 53(2) pp. 163-72.

Ahmad, Y.J.
"Administration of Integrated Rural Development Programs - A Note on Methodology"
International Labor Review
February 1975, 111(2) pp. 119-42.

Aho C.M.
"The Use of Export Projections in Allocating Foreign Aid Among and Domestic Resources Within Developing Countries"
Journal of Development Studies
April-July 1974, 10(3-4) pp. 403-29.

Alpert, P.
Partnership or Confrontation? Poor Lan ds and Rich
New York: Free Press; London: Collier MacMillan
1973, pp. xiii, 269.
Partial contents: considers why and how developed countries should contribute to economic development of LDCs. Uses examples from Algeria, Tanzania, Cuba, China and Iran.

Amugegar, J.
"Brain Drain and the Irony of Foreign Aid Policy"
Economia Internazionale
November 1968, 21(4) pp. 697-719.

Anderson, J.O.
"Pearson-Kommissionen och det andra utvecklingsdecenniet"(English summary).
Economiska Samfundets Tidskrift
1970, 23(2) pp. 115-22.

Angelopoulos, A.
"The Third World and the Rich Countries. Prospects for the year 2000"
New York and London: Praeger, 1972, pp. xx, 248
Partial Contents: examines the "myth" of development aid and the need for a new international development strategy.

Areskong, Kaj.
"External Public Borrowing: Its role in Economic Development"
New York and London: Praeger $15.00
1969, pp. xiii, 140
Partial Contents: evaluates and examines external public borrowing of LDCs within a macroeconomic framework. Major topics: (1) Purposes and Consequences of External Borrowing; (2) A Theory of External Borrowing and Resource Allocation; (3) An analysis of recent external borrowing by underdeveloped countries. Empirical findings point to a need for drastic reassesment of international development assistance policies.

Anstee, Margaret J.
"The Administration of International Development Aid"
Syracuse, N.Y.: Maxwell School of Citizenship and Public Affairs
Syracuse University, 1969, pp. iv, 59.

Asher, Robert E.
"Foreign Aid: Targets for the 1970s"
Monthly Labor Review
November 1969, 92(11) pp. 23-30.

Bacha, E.L.
"Foreign Capital Inflow and the Output Growth Rate of the Recipient Country: One sector models compared"
Journal of Development Studies
April-July 1974, 10(3-4) pp. 374-81.

Banks, F.E.
"Economic Development, Foreign Aid and Neo-Classical Growth"
Journal Of Development Studies
October 1974, 11(1) pp. 106-8.

Bard, Robert L.
Food Aid and International Agricultural Trade: A Study in Legal and Administrative Control
Toronto, London and Lexington, Mass.: D.C. Health & Co. 1972, pp. xviii, 321.
Partial Contents: discusses current and conceivable food aid programs; interrelationships of food aid and commercial trade.

Bardhan, P.K.
"Terms of Foreign Borrowing"
American Economic Review
June 1973, 63(3) pp. 458-61.

Bauer, Hans Jorg
Entwicklungschilfe
Wien: Osterreichischer Bundesverlag fur Unterricht 1971, pp. 78.

Bauer, P.T.
"Debt Cancellation for Development?"
National Westminster Bank Quarterly Review
November 1974, pp. 46-51.

Bauer, P.T.
"Dissent on Development"
Scottish Journal of Political Economy
February 1969, 16(1) pp. 75-94.

Bauer, P.T. and Yamey, B.S.
"The Economics of the Pearson Report"
Journal of Development Studies
January 1972, 8(2) pp. 319-28.

Bendavid, Avron
Development and Underdevelopment: A Radical View of Constructive Relationships
Haque, Institute of Social Studies Occasional Paper 1973, 10 pp.

Berthelot, Yves
Pour Une Nouvelle Cooperation
Paris: Presses Universitaires de France 1975, pp. 152.

Bertin, Gilles Y.
L'Investissement public international
Paris: Presses Universitaires de France
1971, pp. 204.

Bhagwati, Jagdish N.
Amount and Sharing of Aid
Monograph No. 2, Washington, D.C.: ODC
1970, pp. 197.
Partial Contents: deals with trends, 1960-70, in flow of aid and its distribution among recipients. Examines macroeconomic quantitative models used in determining aid requirements and reviews the economic policy of the U.S., concluding that current declining trends in U.S. aid must be reversed if the recent economic growth of LDCs is to be sustained.

Bhattacharya, D.
"Foreign Aid and Economic Development"
Economic Affairs
Annual Number 1973, 18(1-2) pp. 41-53.

Billerbeck, Klaus
"The Pearson Report"
Weltwirtschaftliches Archiv
1970, 105(1) pp. 133-62.

Blomquist, A.G.
"Foreign Aid, Population Growth and the Gains from Birth Control"
Journal of Development Studies
October 1971, 8(1) pp. 5-22.

Bond, M.E. and Mathis, F.J.
"The Disinterest in Foreign Aid: An Appraisal"
Kyklos
1970, 23(3) pp. 446-72.

Bos, H.C., ed.
Towards balanced international growth: Essays presented to Jan Tinbergen
Amsterdam: North Holland, 1969
pp. x, 329
Partial Contents: Pronk, J.P. and Schreuel, E.J. - "Some Reflections on the Effectiveness of Project vs. Plan Aid" (pp. 283-307).

Budhoo, Davison L.
The Integrated Theory of Development Assistance: An Initial Statement
Mona, Jamaica: Institute of Social & Economic Research, U.W.I.
1973, pp. 79.

Braker, Hans
Multilaterale Hilfeleistung fur Entwichlungslander: ein Beitrag zur internationalen technischwirtschaftlichen Zusammenarbeit
Koln: Westdeutscher Verlag
1968, pp. 191.

Byres T.J., ed.
Foreign Resources and Economic Development. A Symposium on the Report of the Pearson Commission
London: Frank Cass; Portland, Oregon: International Scholarly Book Services
1972, pp. xi, 199.
Partial Contents: discussions of the future of private foreign investment in LDCs; the political economy of foreign aid; aid's ability to promote growth; alternatives to giving aid.

Caseres, L.K.
"The Saving Gap and Foreign Aid: A Comment"
Intermountain Economic Review
Spring 1974, 5(1) pp. 98-104.

Callies, Hans Ulrich
Der Einfluss von Entwicklungshilfeleistungen auf den Konjunkturverlauf und die Beschaftigung im Geberland, unter besonderer Berucksichtigung der BRD
Tubingen: Erdmann
1973, pp. 295.

Chandavarkar, A.G.
"Technical Cooperation within the Third World"
Finance and Development
December 1972, 9(4) pp. 17-22.

Chenery, H.B.
Targets for Development
Cambridge, Mass: Harvard University Development Advisory Service, Economic Development Report No. 153
1970, pp. 40.

Chenery, H.B.
"Restructuring the World Economy"
Foreign Affairs
January 1975, 53(2) pp. 242-63.

Chenery, H.B. and Carter, N.G.
"Foreign Assistance and Development Performance 1960-70"
American Economic Review
May 1973, 63(2) pp. 459-68.

Cockburn, Charles
Construction in Overseas Development: A Search for Appropriate Aid and Trade Measures for the 1970s
London: ODI
1970, pp. 35.
Result of a series of seminars (1968, 69) on contribution which construction industry (particularly in Britain) should make to building programs in LDCs.

Cohen, Benjamin I.
Bilateral Foreign Aid and Multilateral Foreign Aid
New Haven: Yale University Economic Growth Center Discussion Paper No. 78.
1969, pp. 59.

Conference on Methods and Procedures of Evaluation in Development Aid, Berlin 1966
Conference Report
Berlin: German Foundation for Developing Countries, Department of Conferences & Documentation
1966, pp. 211.

Conlisk, J. and Huddle, D.
"Allocating Foreign Aid: An Appraisal of a Self-Help Model"
Journal of Development Studies
March 1969, 7(3), pp. 199-216

Costa, E.
"The World Food Programme and Employment: Ten Years of Multilateral Food Aid for Development"
International Labor Review
March 1973, 107(3), pp. 209-21.

Cox, Robert W., ed.
The Politics of International Organizations: Studies in Multilateral Social and Economic Agencies
New York: Praeger
1970, pp. 319.

Crouch, R.L.
"Economic Development, Foreign Aid and Vintage Growth"
Journal of Development Studies
October 1974, 11(1), pp. 108-12.

Crouch, R.L.
"Economic Development, Foreign Aid and Neoclassical Growth"
Journal of Development Studies
April 1973, 9(3), pp. 353-64.

Cunningham, George
The Management of Aid Agencies: Donor Structures and Procedures for the Administration of Aid to Developing Countries
London: Croom Helm, in association with ODI
1974, pp. vii, 181.

D'Aeth, R.
"Changing Perspective in Educational Planning and Cooperation between countries of the Third World and Western Europe"
World Development
February 1974, 2(2), pp. 33-35.

Davenport, M.
"The Allocation of Foreign Aid: A Cross Section Study"
Yorkshire Bulletin of Economic and Social Research
May 1970, 22(1), pp. 26-38.

Davenport, M.
"The Allocation of Foreign Aid: A Rejoinder"
Bulletin of Economic and Social Research
May 1971, 23(1), pp. 92.

Davis, L.H.
"The Contribution of Foreign Assistance to Agricultural Development: Comment"
American Journal of Agricultural Economics
August 1970, 52(3), pp. 457-59.

Decker, R.L.
"The Saving Gap and Foreign Aid"
Intermountain Economic Review
Fall 1973, 4(2), pp. 45-54.

Diamond, William, ed.
Development Finance Companies: Aspects of Policy and Operation
Baltimore: Johns Hopkins University Press, for IBRD
1968, pp. vi, 119.

Edmunds, S.W.
"How Effective is Foreign Aid?"
California Management Review
Fall 1968, 11(1), pp. 13-22.

Eichberg, H.
"Entwicklungshilfe - Verhaltungsumformung nach europaischem Modell?" (English summary)
Zeitschrift fur Wirtschafts und Sozialwissenschaften
1973, 93(6), pp. 641-70.

Eshag, E.
"Foreign Capital, Domestic Savings and Economic Development: Comment"
Bulletin of Oxford University Institute of Economic Statistics
May 1971, 33(2), pp. 149-56.
See also: Comments on this subject by Kennedy, C. and Thirlwall, A.P., and by Stewart, Frances, and a Reply by Griffin, Keith, in this issue.

France - Direction de l'aide au developpement, Bureau des Programmes
Conditions d'efficacite de l'aide dans 14 etats Africains et malgache: perspectives d'evolution 1970-85.
Paris, 1970.

Frank, C.R. Jr.
"Optimal Terms of Foreign Assistance"
Journal of Political Economy
September-October 1970, 78(5), pp. 1106-14.

Frank, C.R. Jr; Bhagwati, Jagdish N.; Shaw, Robert D'A.; and Malmgren, Harold B.
Assisting Developing Countries: Problems of Debts, Burden-sharing, Jobs and Trade.
ODC Studies - 1. New York and London: Praeger, in cooperation with ODC
1972, pp. xx, 482.
Frank, C.R. Jr. - "Debt and Terms of Aid"
Bhagwati, J.N. - "The Amount and Sharing of Aid"
Shaw, Robert - "Jobs and Agricultural Development"
Malmgren, Harold- "Trade for Development"

Fried, E.R.
"International Liquidity and Foreign Aid"
Foreign Affairs
October 1969, 48(1), pp. 139-49.

Gosalia, Amritlal and Gosalia, Sushila
Aid or Self-aid? Techno-economic measures for the Second Development Decade
Hamburg, Deutsches Ubersee-Institut
1970, pp. 77.
By an engineer and an economist, envisages the time when LDCs can shape their future without relying heavily on aid from industrial countries whose aims are conditioned by political interest.

Goulet, Dennis, and Hudson, Michael
The Myth of Aid: The Hidden Agenda of the Development Reports
New York: International Documentation on the Contemporary Church, North America Orbis Books 1971, pp. 143.
A critique of the development reports resulting from the first development decade.

Gray, C.S.
"The Impact of Foreign Aid for Local Costs on the Donor's International Receipts"
East African Economic Review
June 1971, 3(1), pp. 69-87.

Gray, C.S.
Resource Flows to LDCs: Financial Terms and Their Constraints
New York and London: Praeger
1969, pp. xvii, 305.

Gray, C.S.
"Tied vs. local cost foreign aid in the light of aid adjectives"
East African Economic Review
December 1971, 3(2), pp. 1-18.

Griffin, K.B.
"The Effect of Aid and Other Resource Transfers on Savings and Growth in LDCs: A Comment"
Economic Journal
September 1973, 83(33), pp. 863-66.
See also: Comments by Papanek, G.F. and Newlyn, W.T. in this issue.

Griffin, K.B. and Enos, J.L.
"Assistencia externa: objectivos e consecuencias"
El Trimestre Economico
January-March 1973, 40(157), pp. 3-18.

Grubel, H.G.
"A Proposal to Provide Development Aid Through Equity Investments and Mutual Funds"
Economic Record
March 1970, 46(113), pp. 86-95.

Guth, Wilfred,
Entwicklungspolitik in der Krise
Tubingen: Mohr (Siebesk)
1972, pp. 31.

Gutowski, A. and Hammel, W.
"An Aid Agency's Experience with the Little-Mirrlees Method"
Bulletin of Oxford University Institute of Economic Statistics
February 1972, 34(1), pp. 125-34.

Hamid, N.
"A Critical Appraisal of Foreign Aid Strategy"
Punjab University Economist
December 1970, 8(2), pp. 125-51.

Hannah, J.A.
"New Directions in Foreign Aid for the 1970s"
American Journal of Agricultural Economics
March 1970, 52(2), pp. 302-07.

Hashmi, B.
"Economic Development Without Aid"
Pakistan Economic and Social Review
December 1972, 10(2), pp. 217-29

Hart, Judith
Aid and Liberation: A Socialist Study of Aid Policies
London:Victor Gollancz, 1973, pp. 287.

Hayter, Tedesa
Aid as Imperialism
Harmondsworth: Penguin Books, 1971, pp. i,221.

Henderson, P.D.
"The Distribution of Official Development Assistance Commitments by Recipient Countries and by Sources"
Bulletin of Oxford University Institute of Economic Statistics
February 1971, 33(1), pp. 1-20.

Hirschmann, A.O.
"The Origins and Functions of Foreign Aid: Reply"
Economic Development and Cultural Change
Part I, July 1973, 21(4), pp. 714-6.

Hoffman, M.L.
"The Scaffolding of Aid"
Finance and Development
December 1968, 5(4), pp. 14-19.

Holzman, F.D.
"The Real Economic Costs of Granting Foreign Aid"
Journal of Development Studies
April 1971, 7(3), pp. 244-55.

Horvath, J.
"Foreign Economic Aid in the International Encyclopaedia of the Social Sciences: Review Article"
Journal of Economic Literature
June 1971, 9(2), pp. 432-41.

Horvath, J.
"On the Evaluation of International Grants Policy"
Public Finance
1971, 26(2), pp. 399-405.

Horvath, J.
"Recording Actual Grant Flows in the Balance of International Payments: An Analytical Clarification"
Quarterly Review of Economics and Business
Spring 1974, 14(1), pp. 89-102.

Hubert, K.
"A Theory on the Economic Effects of Food Aid in Recipient Countries"
Zeitschrift fur die gesamte Staatswissenschaft
April 1975, 131(2), pp. 270-86.

Ikemoto, K.
"Some Considerations of the theories of Economic Aid"
Kokumin - Keizai Zasshi
May 1969, 119(5), pp. 53-70.

Islam, Nurul
"International Economic Assistance in the 1970s - A Critique of Partners in Development"
Pakistan Development Review
Winter 1970, 10(4), pp. 469-90.

Jalan, B.
"Gains to donor countries from tied aid"
Finance and Development
September 1969, 6(3), pp. 14-18.

Kahn, R.
"The International Monetary System"
American Economic Review
May 1973, 63(2), pp. 181-88.

Klein, T.M.
"Economic Aid through Debt Relief"
Finance and Development
September 1973, 10(3), pp. 17-20, 34-35.

Klitgaard, Robert E.
Systems for Evaluating Foreign Aid:
theoretical benefits and practical problems
Santa Monica, California: Rand Corporation
1973, pp. 8.

Lakdawala, D.T.
"Development and Foreign Aid"
Indian Economic Journal
January/March 1968, 15(3), pp. 320-42.

Legum, Colin, ed.
The First UN Development Decade and its Lessons
for the 1970s
New York and London: Praeger, in cooperation with
Vienna Institute for Development
1970, pp. xxxiii, 312.

Levitt, M.S.
"Aid and the Balance of Payments: The Scope for
Untying and Increasing Aid"
Manchester School of Economics and Social Studies
September 1970, 38(3), pp. 247-57.

Lewis, S.R.
Domestic Saving and Foreign Assistance when foreign
exchange is undervalued.
Williamstown, Mass: Center for Development Economics,
Williams College
1969, pp. viii, 32.

Madhava, K.B., ed.
International Development, 1969: Challenges to
prevalent ideas on development
Dobbs Ferry: Oceana, for Society for International
Development, 1970, pp. xv, 399.
Proceedings of 11th World Conference of SID, 1969.
Discussions center on redefinition of development
goals, foreign aid, manpower, education.

Marquez, Javier
Instrumentos para intensificar la contribucion financiera de Europa a America Latina
Centro de Estudios Monetarios Latino - americanos 1970, pp. viii, 79.
Discusses the need for foreign investment, and its forms, and new possibilities for attracting foreign aid and investment.

Marris, R.
"Can we measure the need for Development Assistance?"
Economic Journal
September 1970, 80(319), pp. 650-67.

Mayer, J.
"Coping with Famine"
Foreign Affairs
October 1974, 53(1), pp. 98-120.

Meerman, J.P.
"Issues concerning Capital Assistance to LDCs: Comment"
Economic Development and Cultural Change
January 1974, 22(2), pp. 338-44.

Meier, Gerald M.
Problems of Cooperation for Development
New York, Toronto and London: Oxford University Press 1974, pp. xii, 249. A textbook, with emphasis on foreign aid, private foreign investment and international trade.

Mende, Tibor
From Aid to Recolonization: Lessons of a failure
New York: Pantheon Books (French Edition 1972) 1973, pp. xxix, 317.

Michanek, Ernst
The World Development Plan. A Swedish Perspective
Stockholm: Almquist and Wiksell for the Dag Hammarskjold Foundation, 1971, pp. 71.
Surveys the experience of the first Development Decade.

Montrie, C.
"The Organizations and Functions of Foreign Aid"
Economic Development and Cultural Change, Part I
July 1973, 21(4), pp. 697-713.

Mosher, A.T.
"Implications of the Green Revolution for Technical and Economic Assistance. Discussion"
American Journal of Agricultural Economics
December 1970, 52(5), pp. 713.

Ng, Y.
"Optimal Terms of Foreign Assistance: Comment"
Journal of Political Economy, Part I,
March-April 1973, 81(2), pp. 488-90.

Norbye, O.D.
"Adequate Health Services for Poor Countries: How can the Rich Countries contribute to Reaching such a goal?"
World Development
February 1974, 2(2), pp. 13-17.

OECD
Aid to Agriculture in Developing Countries
Paris, OECD, 1968, pp. 184.
Factual report on the different kinds of policies followed by DAC members and the various international agencies. Data from mid 1960s.

O'Kelly, Elizabeth
Aid and Self-Help: A General Guide to Overseas Aid
London: C. Knight, 1973, pp. x, 140.

Onyemulukwe, Clement Chukwukadibia
Economic Underdevelopment: An Inside View
London: Longmans, 1974, pp. 123.

Paakkanen, J.
"Vaikutelmia kehitysmaiden tilanteesta ja kehitysavusta"
(the developing countries and development aid)
(English summary)
Kansantalondellinen Aikakanskirja
1969, 65(1), pp. 27-36.

Papanek, G.F.
"Aid, Foreign Private Investment, Savings and Growth in LDCs"
Journal of Political Economy
January-February 1973, 81(1), pp. 120-30.

Patel, H.M.
"Two Views on Foreign Aid"
Artha-Vikas
January 1969, 5(1), pp. 77-80.

Pearson, Lester B.
The Crisis of Development
New York and London: Praeger, for the Council on Foreign Relations
1970, pp. viii, 117.

Pearson, Lester B.
Partners in Development: Report of the Commission on International Development
New York and London: Praeger, 1969, pp. xvi, 399.
Assesses the motivation behind foreign aid, its impact on recipients, and the methods used in its administration.

Piatier, A.
"L'Occident devant les Pays sous-developpes: Une Nouvelle politique est-elle possible?"
Economies et Societes
September 1968, 2(9), pp. 1791-1828.

Please, Stanley
Capital flows and income transfers within and between nations to sustain the agricultural revolution
Washington, D.C.: IBRD, 1969, pp. 15.

Pyle, D.
"The Allocation of Foreign Aid: A Comment"
Bulletin of Economic and Social Research
May 1971, 23(1), pp. 86-91.

Richards, J.H.
International Economic Institutions
New York: Holt, Rhinehart and Winston
1970, pp. xv, 334.

Ripkin, P.
"Some Aspects of Rural Development Programs and Neo-Colonialism"
World Development
February 1974, 2(2), pp. 109-10.

Ripman, H.B.
"Project Supervision"
Finance and Development
June 1973, 10(2) pp. 14-18.

Rogers, K.D., Srivistava, U.K. and Heady, E.O.
"Modified Price, Production and Income Effects of Food Aid under Market-Differentiated Distortion"
American Journal of Agricultural Economics
May 1972, 54(2), pp. 201-8.

Rondinelli, Dennis A. and Radosevitch, H.R.
Sectoral Project Administration and Development Planning: the changing strategy of International Assistance
Nashville, Tenn.: Graduate School of Management Vanderbilt University, 1974, pp. 69.

Rose, W.D., et al.
Joint Ventures and their Relationship to Aid Programs
Wellington, N.Z.: Institute of Economic Research, Wellington, Discussion Paper No. 17.
1974, pp. 23.

Sandford, J.
"Development Theory and the multilateral Development Banks: An Assessment of the Effectiveness of Strategies used in international Development Finance"
American Journal of Economics and Sociology
April 1975, 34(2), pp. 175-95.

Satamo, K.
"Det internationella utvecklingsbistandet" (English summary)
Ekonomiska samfundets Tidskrift
1970, 23(1), pp. 17-31.

Schutjer, W., and Weigel, D.
"The Contribution of Foreign Assistance to Agricultural Development"
American Journal of Agricultural Economics
November 1969, 51(4), pp. 788-97
See also: August 1970 Issue, pp. 459.

Selwyn, Percy
"The Least Developed Countries as a Special Case"
World Development
April-May 1974, 2(4-5), pp. 35-42.

Sen, Sudhir
A Richer Harvest: New Horizons for Developing Countries
Maryknoll, N.Y.: Orbis Books; New Delhi: Tata McGraw-Hill
1974. pp. xiii, 573.
Studies the roles in development of donors, receivers and administrators of aid. Part I analyses the UN as an aid-administering agency, with suggestions for improved performance. Part II deals with problems of planning and implementation of country programs (emphasis is on agriculture with special reference to India). Part III considers relations between rich and poor within a developing country.

Sen, S.R.
"Whither Aid?"
American Journal of Agricultural Economics
December 1971, 53(5), pp. 768-76.

Smethurst, R.G.
"Direct Commodity Aid: A Multilateral Experiment"
Journal of Development Studies
April 1969, 5(3).

Society for International Development
International Development 1967. International Technical Cooperation: Evaluation and Prospects
Dobbs Ferry, N.Y.: Oceana Publications
1968, pp. vi, 153.
Proceedings of 9th World Conference of SID.

Soper, T.
"Western Attitudes to Aid"
Lloyd's Bank Review
October 1969, (94), pp. 17-33.

Stamp, M.
"Has Foreign Capital Still a Role to Play in Development"
World Development
February 1974, 2(2), pp. 123-29.

Stepanov, L.
"One Percent: The Problem of Economic Aid"
Annals of the American Academy of Political and Social Science
November 1969, 386, pp. 41-53.

Stoner, J.A. and Aram, J.D.
"Effectiveness of Two Technical Assistance Efforts in Differing Environments"
Journal of Development Studies
July 1973, 9(4), pp. 508-17.

Streeten, Paul
The Frontiers of Development Studies
New York: Wiley and Sons, 1972, pp. xv, 498.
Partial contents: discussions of international investment and aid, problems in transfer of technology, relations between developed and developing countries.

Tewes, T.
"Exporthilfe oder Investitionshilfe?"
Weltwirtschaftliches Archiv
1969, 103(1), pp. 72-92.

Thirlwall, A.P.
"World Poverty and International Assistance"
Rivista Internazionale de Scienze Economiche e Commerciale
February 1974, 21(2), pp. 151-70.

Thorp, W.L.
"Foreign Aid: A Report on the Reports"
Foreign Affairs
April 1970, 48(3), pp. 561-73.

Tyler, W.G.
"The Issue of Public and Private Development Banking: Comment"
Economic Development and Cultural Change
January 1974, 22(2), pp. 349-50.
See also: Reply by Roberts, P.E., this issue pp. 351-52.

Wall, David
The Charity of Nations: The Political Economy of Foreign Aid
New York: Basic Books, 1973, pp. vii, 181.
Presents a politico-economic analysis of aid as it affects donor and recipient countries at the domestic and international relations levels. Examines structure of Western aid programs, motives for giving aid, its alternative forms, the control of aid, and the criteria used to determine its allocation.

Wall, David, ed.
Chicago Essays in Economic Development
Chicago and London: University of Chicago Press 1972, pp. xvi, 370. 15 Essays.
Partial Contents: section on Trade and Aid.

Ward, Barbara and Bauer, P.T.
Two Views on Aid to Developing Countries
London: Institute of Economic Affairs, 1966, pp. 58.

White, J.A.
The Politics of Foreign Aid
New York: St. Martin's Press
1974, pp. i, 315.

Wightman, David R.
The Economic Interest of Industrial Countries in the Development of the Third World
New York: United Nations, 1971, pp. viii, 93.
(UN Center for Economic and Social Information, Briefing Paper, No. 5).

Wittkopf, E.R.
"Foreign Aid and UN Votes: A Comparative Study"
American Political Science Review
September 1973, 67(3), pp. 868-88.

UNCTAD
Financial Flows to and from the Developing
Countries: Report by the UNCTAD Secretariat
Geneva: UNCTAD (TD/B/C 3/110), 1973, pp. 53.

Zeylstra, Willem Gustaaf
Aid or Development: The Relevance of Development
Aid to Problems of Developing Countries
Leyden: Sijthoff, 1975, pp. xviii, 268.

## 2. Recipient Countries or Regions


Abdullah, A.
"Review Article: The Success Story that Wasn't: Pakistan and the DAS".
Economic Development and Cultural Change, July 1975, 23(4) pp. 761-67.

Aboucher, A.
"The Performance of the Berkeley Program in Brazil: Comment" with a reply by D. L. Huddle,
Economic Development and Cultural Change, April 1974, 22(3), pp. 503-9.

Adams, D.W.
"Aid Agencies and Land Reform in Latin America: A Suggested Change in Policy".
Land Economics, November 1970, 46(4), pp. 423-34.

Ahmad, M & Ahmad E.
"A Test of the Griffin-Enos Hypothesis for Pakistan"
Pakistan Economic and Social Review, Spring 1974, 12(1), pp. 27-33.

Arndt, H. W. and Sundrum, R. M.
"Foreign Capital and Indonesian Economic Growth: A Comment".
Bulletin of Indonesian Economic Studies, July 1973, 9(2), pp. 90-95. See also Strout, A.M., pp. 96-99 and pp. 77-90 in this issue, on same subject.

Betz, Fritz H.
Entwicklungshilfe an Afrika: ein Statistisches Kompendium mit Karten, Schaubildern und Erlauterndem Text.
Munchen. Weltforum Verlag, 1970. pp. i, 120.

Bowles, Chester
"America & Russia in India"
Foreign Affairs, July 1971, 49(4), pp. 636-51.

Brecker, Irving and Abbas, S.A.
Foreign Aid and Industrial Development in Pakistan.
London and New York: Cambridge University Press, 1972. pp. xiv, 271.

Caldwell, J. Alexander
American Economic Aid to Thailand.
Lexington, Mass., Toronto and London: D.C. Heath, 1974. pp. xv, 248.

Chapin, E.
"Success Story in South Korea".
Foreign Affairs, April 1969, 47(3), pp. 560-74.

Dagli, Vadilal, ed.
Two Decades of Indo-US Relations.
Bombay: Vora, 1969. pp. xii, 231. $7.00.
(28 essays by US and Indian contributors on US participation in Indian economic development).

Datar, Asha L.
India's Economic Relations with the USSR & Eastern Europe, 1953-69.
London & New York: Cambridge University Press, 1972.
pp. xiv, 278. $18.50.

Desai, Padma
The Bokaro Steel Plant: A Study of Soviet Economic Assistance.
New York: American Elsevier; Amsterdam & London: North Holland Pub. Co., 1972.
pp. xviii, 108. $6.75.
Narrates & analyzes events associated with Indo-Soviet conception and implementation of Bokaro steel plant, 1957-72.

Dudley, L. and Sandilands, R.J.
"The Side Effects of Foreign Aid: The Case of PL 480 Wheat in Colombia".
Economic Development and Cultural Change, January 1975, 23(2).
pp. 325-36.

Durdag, Mete
Some Problems of Development Financing. A Case Study of the Turkish First Five-Year Plan, 1963-67.
Dordrecht, Holland: D. Reidel, 1973.
pp. xiii, 297.
Partial contents: Reviews targets and financing strategy of First Plan and examines the three main sources of savings: foreign assistance, private savings and taxation.

Eldridge, P.J.
The Politics of Foreign Aid in India.
New York: Schochem. 1970. pp. xx, 289. $9.00.
Discusses the Indian aid program of US, UK, West Germany, USSR, et al, and international and private foundations. Traces effects of such aid on Indian political behavior. Chapters on Indian oil and steel industries.

Eshag, B.
"Study on (sic) the excess cost of Tied Economic Aid Given to Iran in 1966/67".
Tahqiqat-eqtesadi, Spring 1971, 8(22), pp. 3-25.

Hallwood, C.P.
"The Impact of Foreign Aid upon India's International Trade, 1951-65".
Bulletin of Economic & Social Research, November 1973, 25(2), pp. 129-45.

Hazari, R.K., ed.
Foreign collaboration. Report & Proceedings of the Seminar Held by the Center of Advanced Studies, Department of Economics, University of Bombay, 1965. Bombay: University of Bombay, 1967. pp. iv, 271. Rs. 18.00.
Parts I & II contain empirical analytical papers on role of foreign economic assistance in India & Part III is a summary of the proceedings.

Healey, D.T.
"Foreign Capital & Exports in Economic Development: The Experience of 8 Asian Countries".
Economic Review, September 1973, 49(127), pp. 394-419.
Analyses recent reduction in aid to LDCs and concludes that they must rely on exports as the engine of growth in future. Examines relation between exports and growth in Burma, Ceylon, Indonesia, Malaysia, Philippines, Taiwan and Thailand 1950-69.

Helleiner, G.K.
"Commerce, Assistance et Edification de la Nation en Tanzanie".
Revue Economique de Madagascar, 1968-69, (3-4), pp. 125-64.

Herrera, A.O.
La Ciencia en el Desarrollo de Americana Latina.
Estudios Internacionale, April/June 1968, 20(1), pp. 38-63.

Hershlag, Z.Y., ed.
Israel-Africa cooperation. Final Report.
Tel Aviv: Tel Aviv University, Israel, 1973. pp. xiv, 116.

Holbik, K. and Drachman, E.
"Egypt as Recipient of Soviet Aid, 1955-70".
Zeitschrift fur die gesamte Staatswissenschaft, January 1971, 127(1), pp. 137-65.

Hutcheson, Thos. L. and Porter, Richard C.
The Cost of Tying Aid: The Method and Some Colombian Estimates.
Princeton Studies in International Finance No. 30.
Princeton, N.J., International Finance Section, Department of Economics, Princeton University, 1972. pp. 53. $1.00.

Indian Council on Current Affairs - Research Committee
Foreign Aid: A Symposium, a Survey and an Appraisal
Calcutta: Indian Council on Current Affairs, 1968, distribution, Oxford Book and Stationery Co. pp. 444.

Islam, Nurul
"Foreign Assistance and Economic Development: The Case of Pakistan".
Economic Journal, March 1972, 82(325s), pp. 502-30.

Kamrany, Nake M.
Peaceful Competition in Afghanistan: American and Soviet Models for Economic Aid
Washington, D.C.: Communication Service Corporation, 1969. pp. ix, 125. $6.50.

Kaplan, S.S.
"US Aid and Regime Maintenance in Jordan, 1957-73".
Public Policy, Spring 1975, 23(2), pp. 189-217.

Katz, S. Stanley
External Assistance & Indian Economic Growth
Asia Monograph Series. No.19. New York: Asia, 1968. pp. xiii, 104.

Kim, H.K.
"The Role of Foreign Aid in Assisting the Stabilization of the Korean Economy".
University of Washington Business Review, Winter 1969, pp. 62-67.

Kim, S.
"Foreign Assistance & Korea's Economic Growth".
Australian Economic Papers June 1972, 11(18), pp. 89-102.

Kim, Seung Hee
Foreign Capital for Economic Development: A Korean Case Study.
New York and London: Praeger, 1970.
pp. xxiii, 206. $15.00.
Partial contents: Describes how utilization of US economic and military aid propelled Korea from a capital importer to a net capital exporter.

Klages, W.J. and Raffa, F.A.
"A Note on Soviet Economic Aid to the LDCs".
Rivista Internazionale de Scienze Economiche e Commerciale, November 1974, 21(11), pp. 1065-70.

Klausen, Arne Martin
Kerala Fishermen & the Indo-Norwegian Pilot Project.
Norway: Universitats Talaget, 1968. pp. 201. $6.35.
Report on pilot project initiated under a Norwegian technical aid program in India. Analysis largely anthropological.

Kojina, K.
"Asian Developing Countries & PAFTA: Development Aid & Trade Preferences".
Hitotsubashi Journal of Economics, June 1969, 10(1), pp. 1-17.

Kokulinsky, D. and Park S.
"Die Entwicklungshilfe als ein aussenpolitisches Instrument der Volksrepublik China". (Eng. summary).
Zeitschift fur die gesamte Staatswissenschaft, August 1973, 129(3), pp. 559-72.

Koo, Anthony Y.C.
The Role of Land Reform in Economic Development: A Case Study of Taiwan.
New York and London: Praeger, 1968, pp. xvii, 197.
Partial contents: An assessment of the role of the Joint Commission for Rural Reconstruction.

Krassowski, Andrzej
The Aid Relationship: A Discussion of Aid Strategy with Samples from the American Experience in Tunisia.
London, O.D.I., 1968, pp. 124.

Lodge, D.C.
"US Aid to Latin America: Funding Radical Change"
Foreign Affairs, July 1969, 47(4), pp. 735-49.

Losman, D.L.
"The Economics of Bloc Aid & Trade with Cuba".
Marquette Business Review, Summer 1970, 14(2), pp. 68-77.

Mangahas, M.
"Foreign Assistance in Models of the Philippine Economy".
Philippine Economic Journal, September 1970, 9(2), pp. 209-30.

McCamant, John F.
Development Assistance in Central America
New York & London: Praeger, 1968.
pp. xvi, 351. $15.00.
Analyzes all bilateral and unilateral financial and technical assistance in Central American countries since their origin during World War II, and the political and economic changes that resulted.

Mehta, G.L.
"Development & Foreign Collaboration".
Indian Economic Journal, January/March 1968, 15(3), pp. 343-58.

Miyamoto, I.
"The Real Value of Tied Aid: The Case of Indonesia in 1967-69".
Economic Development and Cultural Change, April 1974, 22(3), pp. 436-52.

Morris, Rofer, and Sheets, Hal
Disaster in the Desert. Failures of International Relief in the West African Drought.
Humanitarian Policy Studies, Washington, D.C.: The Carnegie Endowment for International Peace, 1974.
pp. vii, 167.

N'dongo, Sally
La Cooperation Franco-Africaine.
Paris: Francois Maspero, 1972. pp. 139.

Newell, R.S.
"Afghanistan: The Dangers of Cold War Generosity".
Middle East Journal, Spring 1969, 23(2), pp. 168-76.

Nimmand, Bahman
Iran: The New Imperialism in Action.
Translated: Leonard Mins.
New York & London: Monthly Review Press, 1969.
(Originally published 1967 in German). pp. 192. $6.96.
Attacks Iranian political and economic policy and the US aid program in Iran.

O'Brien, R.C.
"Colonisation to Cooperation?
French technical assistance in Senegal".
Journal of Development Studies, October 1971, 8(1), pp. 45-58.

Petersen, G.H.
"Latin America: Benign Neglect is not Enough"
Foreign Affairs, April 1973, 51(3), pp. 598-607.

Posthumus, G.A.
The Intergovernmental Group on Indonesia
Rotterdam. Rotterdam University Press, 1971.
pp. v, 68.

Shirazi, Yusuf H.
Aid or Trade? (Trends, Turnovers, Torpors).
Karachi: Shirazi Investments Ltd., 1969.
pp. iii, 162. $2.50.
Study of Pakistan's foreign economic relations.

Sinha, R.P.
Japan's "Aid" to Developing Countries.
World Development, August 1974, 2(8), pp. 15-20.

Singer, H. & Doss, A.
"Technical Assistance to Kenya: Some Thoughts on Flows & Programming".
East African Economic Review, June 1969, 1(1), pp. 7-28.

Sperling, Jan Bodo
"The Human Dimension of Technical Assistance: The German Experience at Rourkela, India.
(Translator: Gerald Onn). Ithaca & London: Cornell University Press, 1969. (German edn. pub. 1965).
pp. xv, 227. $8.50.
The Rourkela project involved construction of a large steel mill in Orissa by German & Indian engineers.

Streeten, P.
Aid to Africa. A Policy Outline for the 1970s.
New York & London: Praeger, with cooperation of the U.N., 1972. pp. xvii, 169, $12.50
Analyzes quantity and quality of official aid to Africa by different countries, 1960-67. Examines donors' policies; trends in volume of resource transfers; the aid target; aid priorities; problems of debt; the investment-savings and absorptive capacity gaps, development planning, the problem of tied aid, etc.

Streeten, Paul & Sutch, Helen
Capital for Africa: The British Contribution.
London: Africa Publications Trust, 1971. pp. 36.

Swamy, Subramanian
Indian Economic Planning - An Alternative Approach.
New York: Barnes & Noble, 1971. pp. 143. $10.00.
Presents Swami's "Economic Nationalism".
Rejects the use of foreign aid and advice of "foreign experts".

C. Tamayo, X.
"The ILO & Development in the Americas".
International Labor Review, December 1969, 100(6).
pp. 505-50.

Talbot, P.
"The American Posture Towards India & Pakistan"
Annals of the American Academy of Political and Social Science, July 1970, 390, pp. 87-97.

Thomas, J.W.
"Development Institutions, Projects and Aid: A Case Study of the Water Development Program in East Pakistan".
Pakistan Economic and Social Review, Spring 1974, 12(1), pp. 77-103.

Thompson G. & Manning R.C.
"The World Bank in Indonesia".
Bulletin of Indonesian Economic Studies, July 1974, 10(2), pp. 56-82.

Tokman, V.E.
"An Evaluation of Foreign Aid: The Chilean Case".
Bulletin of Oxford University Institute of Economics & Statistics, May 1969, 31(2), pp. 89-103.

Weinstein, Warren
Chinese & Soviet Aid to Africa.
New York & London: Praeger 1975, pp. xxii, 290.
$20.00

Weisskopf, T.E.
"Dependence & Imperialism in India".
Review of Radical Political Economics, Spring 1973, 5(1), pp. 53-96.

Widstrand, Carl Gasta & Cervenka, Zalenek
Scandinavian Development Agreements with African Countries.
Uppsala: Scandinavian Institute of African Studies, 1971. pp. 74.

Williamson, Robert B; Glade, William P. Jr. & Schmitt, Karl M., eds.
Latin American & US Economic Interactions: Conflict, Accommodation and Policies for the Future
Washington, D.C., American Enterprise Institute for Public Policy Research, 1974. pp. 380. $8.50.
Eighteen papers grouped as follows: 1) trade relations 2) US direct foreign investment, 3) a public policy statement by the President of the Inter-American Development Bank, 4) alternative forms of US business and economic involvement in Latin America.

World Bank
The World Bank Group in the Americas.
Washington, D.C.: Author, 1974. pp. 105.

## 3. Specific Donors or Facilities


Abbott, G.C.
"How Inflationary is the Link Scheme?"
Economia Internationale, February 1974, 27(1).
pp. 3-20.

Amir, Shimeon
Israel's Development Cooperation with Africa, Asia and Latin America.
New York & London: Praeger, 1974. pp. xvi, 133. $12.50.

Asher, Robert E.
Development Assistance in the 1970s. Alternatives for the U.S.
Washington, D.C.: Brookings Institution, 1970.
pp. xv, 248.
Partial Contents: discusses multilateral and bilateral aid channels; specific mechanisms for providing capital and technical assistance.

Baer, W.
"The World Bank Group and the Process of Socio-Economic Development in the Third World"
World Development, June 1974, 2(6). pp. 11-26.

Bauer, P. T.
"Inflation, SDRs and Aid"
Lloyd's Bank Review, July 1973, (109). pp. 31-35.

Bauer, P.T.
"The SDR Link Scheme - A Comment".
Lloyd's Bank Review, January 1974, (111). pp. 42-46.

Behrman, J.R.
"UNCTAD Secretariat, Trade Prospects & Capital Needs of LDCs: Review Article"
International Economic Review, October 1971, 12(3).
pp. 519-25.

Bhattacharya, D.
"On Linking SDRs & Development Assistance".
Review of Social Economy, April 1975, 33(1). pp. 62-73.

Bhattacharya, D.
"The Special Drawing Rights and the Developing Countries".
Rivista Internazional di Scienze Economiche e Commerciale, August 1974, 21(8). pp. 716-27.

Bowles, Chester
"America & Russia in India".
Foreign Affairs, July 1971, 49(4). pp. 636-51.

Caballero Tamayo, X.
"The ILO & Development in the Americas".
International Labor Review, December 1969, 100(6). pp. 505-50.

Caldwell, J.A.
American Economic Aid to Thailand
Lexington, Mass., Toronto & London: D.C. Heath, 1974.
pp. xv, 248.

Chadenet, B., & King, J.A.
"What is a World Bank Project?"
Finance & Development, September 1972, 9(3). pp. 2-12.

Czarnecki, Marian A.
Deficiencies in the Management & Delivery of UN Technical & Pre-investment Assistance: Report of a Staff Survey Team to the Committee on Foreign Affairs. U.S. House of Representatives. Washington, D.C.: U.S. Government Printing Office, 1971. pp. v, 50.

Dagli, V.
Two Decades of Indo-U.S. Relations.
Bombay: Vora, 1969. pp. xii, 231. $7.00.
(28 essays by US & Indian contributors on US participation in Indian economic development).

Datar, A.L.
India's Economic Relations with the USSR & Eastern Europe.
London & New York: Cambridge University Press, 1972.
pp. xiv, 278. $18.50.

Dell, Sidney
The Inter-American Development Bank: A Study in Development Financing.
New York & London: Praeger, 1972. pp. xv, 255. $15.00.

Dinwiddy, Bruce, ed.
Aid Performance & Development Policies of Western Countries: Studies in US, UK, EEC & Dutch Programs.
New York & London: Praeger, in association with the Overseas Development Institute, 1973. pp. vii, 139. $11.00.

Gand, W.
"The Current Effect of the American Aid Program"
Annals of the American Academy of Political & Social Science, July 1969, July 1969, 384. pp. 73-84.

Gosovic, Branislav
UNCTAD: Conflict & Compromise. The Third World's Quest for an Equitable World Order Through the UN.
Leiden, Nederlands: A.W. Sijthoff, 1971. pp. xiv, 349.

Grubel, H.G.
"Basic Methods for Distributing Special Drawing Rights & the Problem of International Aid".
Journal of Finance, December 1972, 27(5). pp. 1009-22.

Hallwood, P.
"Bilateral or Multilateral Aid - The American Policy".
National Westminster Bank Quarterly Review, August 1972. pp. 57-67.

Hasegawa, Sukehiro
Japanese Foreign Aid: Policy & Practice.
New York & London: Praeger, 1975. pp. xv, 172.

Hershlag, Z.Y., ed.
Israel - Africa Cooperation. Final Report.
Tel Aviv: Tel Aviv University, Israel, 1973. pp. xiv, 116.

Holbik, K.
"Development Banks: A Catalyst for Economic Progress"
Rivista Internazionale de Scienze Economiche e Commerciale, November 1969, 16(11). pp. 1053-73.

Holbik, K.
The US, the Soviet Union & the Third World.
Hamburg, Germany. Verlag Weltarchiv GmbH, 1968. p. 110.

Holbik,K. & Drachmann, E.
Egypt as Recipient of Soviet Aid 1955-70.
Zeitschrift fur die gesamte Staatswissenschaft, January 1971, 127(1), pp. 137-65.

Holbik, K. & Myers, H.A.
West German Foreign Aid, 1956-66: Its Economic & Political Aspects.
Boston: Boston University Press 1968. pp. xii, 158. $7.95.

Hornbostel, P.A.
"A New Emphasis for IFC".
Columbia Journal of World Business, November-December 1969, 4(6). pp. 63-71.

Howe, James W. et al
The US & the Developing World: Agenda for Action 1974.
New York & London: Praeger, for the Overseas Development Council, 1974. pp. viii, 208. $3.95.

Howe, James W. et al
The US & World Development: Agenda for Action 1975.
New York & London: Praeger, for the Overseas Development Council, 1975. pp. viii, 277. $4.50.

Hsia, R.
"The Structure of Japan's Capital Flow in Asia".
Rivista Internazionale di Scienze Economiche e Commerciale, April 1975, 22(4). pp. 324-37.

Hudson, Michael
Super Imperialism: The Economic Strategy of American Empire. pp. xxx, 304. $9.95.

Hunter, Robert E. & Rielly, John E., eds.
Development Today. A New Look at US Relations with the Poor Countries.
New York & London, Praeger, 1972. pp. x, 286. $9.00.

Johnson, H.G.
"The Effect of the Monetary Problems on Development Cooperation: Linking SDRs & Development".
Malayan Economic Review, October 1972, 17(2). pp. 1-10.

Kahn, R.F.
"SDRs & Aid".
Lloyd's Bank Review, October 1973, (110). pp. 1-18.

Kamarck, A.M.
"The Allocation of Aid by the World Bank Group".
Finance & Development, September 1972, 9(3). pp. 22-24.

Kamrany, N.M.
Peaceful Competition in Afghanistan: American & Soviet Models for Economic Aid.
Washington, D.C.: Communication Service Corporation, 1969. pp. ix, 125. $6.50.

Kaplan, S.S.
"US Aid & Regime Maintenance in Jordan, 1957-73".
Public Policy, Spring 1975, 23(2), pp. 189-217.

Kessler, G.A.
"Should Development Aid be Linked to SDR Creation?"
Development Economist, March-April 1971, 119(2). pp. 206-11.

King, J.A.
"The World Bank, Project Lending & Cooperatives".
Finance & Development, March 1972, 9(1). pp. 30-35.

Krassowski, Andrzej & Soper, Tom, eds.
British Development Policies: Needs & Prospects, 1968.
ODI Review - 2. London, ODI, 1968. pp. 83. 12s 6d.

Kumbhat, J.R.
"The Economic Rationale of USA Assistance".
Economic Affairs, August 1974, 19(8). pp. 346-51.

Lambe, James, ed.
British Development Policies, Needs & Prospects 1969.
ODI Review - 3. London, ODI, 1969. pp. 79. 12s 6d.

Lewis, John P & Kapur, Ishan
The World Bank Group, Multilateral Aid & the 1970s.
Lexington, Mass., Toronto & London: D.C. Heath, 1973.
pp. xvii, 168. $13.00.

Lodge, D.C.
"US Aid to Latin America: Funding Radical Change".
Foreign Affairs, July 1969, 47(4). pp. 735-49.

Losman, D.L.
"The Economics of Bloc Aid & Trade with Cuba".
Marquette Business Review, Summer 1970, 14(2). pp. 68-77.

Mason, Edward S. & Asher, Robert E.
The World Bank Since Bretton Woods.
Washington, D.C.: Brookings Institution, 1973. pp. xxiii, 915.

Martin, Edwin, M.
Development Assistance: Efforts & Policies of the Members of the DAC.
(1968 Review) Paris: OECD, 1968. pp. 277. $6.00.

Maynard, G.
"SDRs & Development Aid".
Journal of Development Studies, July 1973, 9(4). pp. 518-48.

Montgomery, J.D.
"Programs & Poverty: Federal Aid in the Domestic & International Systems".
Public Policy, Summer 1970, 18(4). pp. 517-37.

Murray, T.
"EEC Enlargement & Preference for the Developing Countries".
Economic Journal , September 1973, 83(331). pp. 853-57.

N'Dongo, Sally
La Cooperation Franco-Africaine
Paris: Francois Maspero, 1972. pp. 139.

O'Brien, Rita, C.
French Technical Assistance in Senegal".
Journal of Development Studies, October 1971 8(1).
pp. 45-58.

Pinstrup-Andersen, P & Tweeten, L.G.
"The Value, Cost & Efficiency of American Food Aid".
American Journal of Agricultural Economics,
August 1971, 53(3). pp. 431-40.

Polasek, M.
"IMF Special Drawing Rights & Economic Aid to LDCs".
Economic Review, September 1973, 49(127). pp. 358-76.

Posvar, Wesley W.
"Reshaping Foreign Policy".
Annals of the American Academy of Political & Social Science, July 1971, 396(0). pp. 105-14.

Prakash, S.
"Is PL 480 Inflationary?
Arthaniti, January-July 1968, 11 (1-2). pp. 98-102.

Prokhorov, G.
"Cooperation Between the USSR and Developing Countries in the Promotion of Industrial Exports".
Tahqiqat-e-Eqtesadi, Summer-Autumn 1970, 7 (19-20).
pp. 100-39.

Radetski, Marian
Aid & Development: A Handbook for Small Donors
New York & London: Praeger, 1973. pp. xxiv, 323. $21.50.

Reid, E.
"McNamara's World Bank".
Foreign Affairs, July 1973, 51(4). pp. 794-810.

Reuber, G.L.
"Canada's Economic Policies Towards the Less Developed Countries".
Canadian Journal of Economics, November 1968, 1(4).

Sankaran, S.
"Population & the World Bank".
Finance & Development, December 1973, 10(4).

Schmitt, H.O.
"Development & Assistance: The View from Bretton Woods".
Public Policy, Fall 1973, 21(4). pp. 585-600.

Secchi, C.
"La Crisi Degli Aiuti e il Ruolo Dell'Italia".
(English summary).
Rivista Internazionale di Scienze Economiche e Commerciale,
February 1974, 21(2). pp. 171-8.

Secchi, C.
"Diritti Speciali de Prelievo (DSP) e Finanziamento Allo Sviluppo: i termini del Problema".
(English summary).
Rivista Internazionale di Scienze Economiche e Commerciale, June 1972, 19(6). pp. 531-64.

Secchi, C.
"Il tinnovo Della Associazione Tra la CEE e i SAMA e le Tendenze Della Politica Communitaria Verso i Paesi Sottosviluppati".
(English summary)
Rivista Internazionale de Scienze Economiche e Commerciale, November 1973, 20(11). pp. 1081-1108.

Singh, Manmohan
Regional Development Banks.
New York: Carnegie Endowment for International Peace, 1970. pp. 83.

Snow, Donald M.
The World Bank as an Actor in International Politics.
Ann Arbor, Michigan: University Microfilms, 1971. pp. 251. (Thesis, Indiana University).

Stek, P.
"SDR Creation, Development Aid and the Adjustment Process".
De Economist, 1974, 122(5). pp. 427-39.

Sturc, E.
"Fund Activities in Developing Countries".
Finance & Development, June 1972, 9(2). pp. 2-7.

Sturmthal, A.
"The Changing Role of the ILO".
Monthly Labor Review, May 1970, 93(5). pp. 41-46.

Talbot, P.
"The American Posture Towards India & Pakistan".
Annals of the American Academy of Political & Social Science, July 1970, 390. pp. 87-97.

Temu, P.
"UNCTAD: Its Role & Prospects"
Journal of Developing Areas, April 1974, 8(3). pp. 355-61.

Tevoedjre, A.
"A Strategy for Social Progress in Africa & the ILO's Contribution".
International Labor Review, January 1969, 99(1). pp. 61-84.

Thompson, G. & Manning, R.C.
"The World Bank in Indonesia".
Bulletin of Indonesian Economic Studies, July 1974, 10(2). pp. 56-82.

UNCTAD
Operation & Effects of the Generalized System of Preferences: Selected Studies Submitted to the Fifth Session of the Special Committee on Preferences, Geneva, April 1973.
New York: Author, 1974. pp. vi, 230.

UN, Department of Economic & Social Affairs.
Implementation of the International Development Strategy: Papers for the First Overall Review and Appraisal of Progress During the Second Development Decade. Two vols.
New York: Author, 1973. pp. ix, 224; ix, 132.

UN, Department of Economic & Social Affairs.
The International Development Strategy: First Overall Review & Appraisal of Issues & Policies.
Report of the Secretary General.
New York: Author, 1973. pp. vi, 91.

UN Institute for Training & Research.
Criteria & Methods of Evaluation: Problems & Approaches.
UNITAR Series No. 1. New York: Author, 1969. pp. 160.

Van Wagenen, R.W.
"Training as an Element in Bank Group Projects".
Finance & Development, September 1972, 9(3), 34-39.

Watanabe, T.
L'Assistenze Internazionale, l'Asia e la Banca Asiatico di Sviluppo.
(English summary).
Bancaria, December 1971, 27(12). pp. 1512-19.

Weinstein, Warren, ed.
Chinese & Soviet Aid to Africa.
New York & London: Praeger, 1975. pp. xxii, 290. $20.00.

White, John
Regional Development Banks: A Study of Institutional Style.
London: ODI, 1970. pp. 204. £2.00.

Williamson, R.B. et al.
Latin American & US Economic Interactions: Conflict, Accommodation & Policies for the Future.
Washington, D.C., American Enterprise Institute for Public Policy Research, 1974. pp. 380. $8.50.
Eighteen papers grouped as follows: 1) trade relations, 2) US direct foreign investment, 3) a public policy statement by the President of the Inter-American Development Bank, 4) alternative forms of US business and economic involvement in Latin America.

World Bank
The World Bank Group in the Americas.
Washington, D.C.: Author, 1974. pp. 105

Central Files F244 Research General

Mr. K. Takeuchi, Acting Chief, EPDCE

March 19, 1976

Orville F. Grimes, Jr., VPD

Oxford Seminar Research Project

Thank you for your note of March 12 clarifying the status of this project. The attached form is transmitted to the Research Committee to signal that a research project has been completed and, in a preliminary sense, how useful it has been. The first page simply gives the project's vital statistics, as you will note; the second asks for an assessment of the extent to which the project met its objectives and how well it was carried out. My thought is that the descriptions at the top of page 2 would make a useful terms of reference for Shamsher Singh's "3-page final report," which would then be attached to page 1 as the final wrap-up on the project. If you agree, we should communicate a copy of page 2 to him at Oxford.

Attachment

OFGrimes:gm OG

Research Funeral

Mr. J. Holsen, EPDDR

March 19, 1976

Benjamin B. King, VPD Signed B. B. King

Prospects

1. This is, with luck, a clarification of my remarks about classification at yesterday's meeting. We spoke of two periods: during adjustment; and post-adjustment. My feeling was that the same classification will not necessarily fit both and that proper classification of the second is at least as important as classification of the first - my guess would be that it is more important. I was therefore entering a plea that country notes give as much attention to characterizing the problems of the post-adjustment period as they do to the adjustment process.

2. Since the meeting, I found your memo of March 17. My tentative amendment to that would be to page 3. I think it will definitely be (not "may be") desirable to split the "prospects" period in two (whether 1980 is the right dividing line or not), since the typologies that may be useful would be related to:

(a) Adjustment so far and adjustment still to come.
(b) Post-adjustment.

3. This raises the question of John Shilling's own adjustment process. How does all this affect the organization of SIMLINK? Is it possible to have a collection of subsets, which can be aggregated in different ways to form the most appropriate groupings for each period, if that indeed turns out to be necessary? Maybe you, he and I could spend half-an-hour some time on this.

cc: Messrs. Tims
Shilling

BBKing:gm

FORM NO. 75
(7-48)

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

# ROUTING SLIP

Date March 18, 1976

| TO- | Name | Room No. |
|---|---|---|
| 1 | (1) Mr. Orville F. Grimes, Jr. | F1233 |
| 2 | (2) ~~Be~~ generally wide of | |
| 3 | the mark, but some useful points. | |
| 4 | Nowicki paper should be worthwhile. I will prepare a reply to Steuber explaining again what we would like from him. | |

FOR- (3) Orv

| | | | |
|---|---|---|---|
| | Action | | Initialing |
| | Approval | | Preparing Reply |
| | Comment | | Previous Papers |
| | Filing | | Noting and Returning |
| | Full Report | | Recommendation |
| | Information | | Signature |

REMARKS

File

FROM- Fritz Steuber, Paris Office

FORM No. 57

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

# OFFICE MEMORANDUM

TO: Mr. Orville F. Grimes, Jr.

DATE: March 18, 1976

FROM: Fritz Steuber

SUBJECT: European Research Institutes.

1. Thank you for your letter of March 10 regarding the subject. I take it that you agree with the substance of my brief memorandum of February 17 to Mr. Benjamin B. King. Your major problem seems to be with France, and this calls for some comments, since I believe you underestimate the extent of contacts that do exist between Bank staff and French researchers.

2. To start with, I refer to the rather monumental study done by Alexander Nowicki in 1968 ("French Academic and Private Research on Economic Development Problems", Economics Department Working Paper No. 12, February 21, 1968). Many of Mr. Nowicki's findings still appear to be valid. I am not sure to what extent Mr. Nowicki's report had a follow-up at the time.

3. It is true that probably nothing very much new has happened on the French scene in recent years. The only noticeable work of direct interest to the Bank is in project appraisal methods. For example, the "Effects Method" (Méthode des Effets) developed by Professor Prou, of University Paris I and by Mr. Marc Chervel of SEDES, has gained quite a wide audience and is studied in several French universities.

4. Over the years French researchers and the Bank staff had contacts on various occasions, such as visits organized to the U.S. under various auspices. For example, in Spring 1975, a trip to the U.S. was organized by the U.S. State Department for French University professors. Several professors took advantage of this trip to make contacts with Bank staff, and more specifically with DPS staff. Other French professors have good personal contacts with Bank staff, and they even took part in some studies made by the Bank. For example, Professor Christian Morisson carried out studies on income distribution in various African and Asian countries, which were used in the "Redistribution with Growth" book.

5. There are also many contacts with non-academic French research institutes. To cite a recent example: Mr. Franchet (a former staff member) from INSEE visited Head Office last November and had intensive conversations with CPS, Areas, and DPS on a possible cooperation for statistical studies in the rural field.

6. In March 1976, Mr. Weiss visited the Institut de Recherche du Coton et des Textiles Exotiques (IRCT), and other CPS staff had in the past frequent contacts with other members of the Groupement d'Etudes et de Recherches pour le

./.

RECEIVED

1976 MAR 22 AM 11: 31

INCOMING MAIL UNIT

Développement de l'Agronomie Tropicale (GERDAT), a semi-public group which manages several applied research institutes.

which? 7. Finally, the European Office maintains regular contacts with a good dozen universities and research institutes, but these contacts are more oriented towards information activities than towards research work. There are also some in-between things, such as the Clermont-Ferrand seminar in November 1974, organized by the European Office, at which four senior Bank staff met with about 30 professors from 15 French universities to discuss project appraisal methods. Such contacts could of course serve as a basis for widening and deepening relations in the research field.

FSteuber:ar

Reginald Riley
Research General

March 18, 1976

TO: Mr. P. C. Goffin, Asst. Director, LCPDR

FROM: P. Z. Kirpich, Chief, LCPA4

SUBJECT: Indexation of Financial Contracts

1. We offer below some comments on the paper on the above subject prepared by the Development Economics Department. In general, we are in agreement with the analysis contained in the paper which is more practical than their earlier paper on this subject. Perhaps it is a reflection of the complexity of the issue and the differences in conditions as between countries, that no operational guidelines of general application seem to emerge.

2. The paper refers, to the difficulty of persuading the Government on indexation. (para 15) Apart from the points made in the paper, mention should also be made of two considerations usually stressed by Governments. Some of them argue that the history of monetary and price trends in their countries and their economic policies does not suggest a tradition of high inflation and that resort to indexing would institutionalize inflation and blunt the edge of efforts to revert to a no-inflation or low inflation situation. The other point is that, compared to investors in the rest of the economy, those in the agricultural sector served by Bank-financed projects would be discriminated against, if these loans alone are indexed, whereas the goal of Government policy is just the opposite, namely, to stimulate investment in this sector. Such discrimination assumes a further dimension, if, as is sometimes the case, the prices of milk, meat and other

foodstuffs are subject to ceilings designed to keep down urban cost of living, while prices of fertilizer and other imputs keep soaring. These arguments gain in strength where the clientele is of small and medium farmers.

3. Various possibilities of partial indexing are discussed. (pages 9-10) Very often, indexing of deposits is not found workable because of practical reasons, and the introduction of indexing for subloans appears inequitable, from the point of view of savers in the economy, in the absence of monetary correction of deposits.

4. Para 21 refers to the practice of loans to sub-borrowers being made in foreign exchange and suggests that it applies to a substantial segment of DFC loans. An exceptional case of this being adopted for agricultural credit was the Second Agricultural Credit Project of Jamaica under which sub-borrowers' loans were designated in US Dollars in entirety, that is, not the foreign exchange part alone.

5. It is interesting to observe that among the "handful" of countries (16) where the projected annual rate of inflation is expected to exceed 10%, 10 are from Latin America. Of the countries covered by Division 2B, only Peru is expected to be in this category, with a projected rate of 15% for 1975-78 while Mexico's future rate is estimated at 7.2% and no estimate is given for Ecuador. Agricultural credit projects are scheduled for appraisal and Board presentation in FY77 for Ecuador and Peru and the rate of interest is bound to be a major issue. In one of the earliest letters the Government on the Ecuador project, the Bank has raised the question of indexing but the Ecuador authorities

have been emphasizing that the high rate of inflation of the last years was an aberration, that currently it was declining and that they are strongly opposed to indexing. A crucial element in the debate with member countries is the estimation of the likely course of inflation during the commitment period of the loan. There seems to be a need to improve arrangements in the Bank for basic data in this area, in terms of a) identifying the cost of living or other price indices which should be considered for the purpose (para 34 of the paper), b) ensuring that the data are obtained promptly from the country and c) refining our methodology for projecting future inflation rates. Such improvement would also help us in dealing with the issue of appropriate levels of provision for price contingencies, which is assuming growing importance in the context of the current cost overruns.

6. Paras 31 to 33 review the possibility of using the foreign exchange rate as the basis for indexation. This, however, rests on the assumption that the countries under reference make frequent exchange rate adjustments in response to drastic price increases - an assumption whose validity is challenged by the recent experience of at least a few countries like Mexico and Jamaica, which have not devalued despite high inflation rates. It is often better, therefore, to deal with the problems of monetary correction on the basis of a domestic price index and deal separately with the residual problem of foreign exchange risk, which may subsist as a result of the fluctuations in the exchange rates of currencies, in which the Bank loan is drawn and would hence have to be repaid.

7. The paper seems to recommend that the application of monetary correction be confined to interest payments and not to the principal. This alternative has the attraction of being simple; but the protection it offers to the financial position of the intermediary is, correspondingly, limited. We would agree, however, that this could be a compromise position to be explored, especially since, unlike in shortterm credit, interest payments can form a substantial share of the total payments received by the lender for a long term loan of the type found in agricultural credit projects with long amortization periods.

8. We strongly endorse the view that the question of indexation should be discussed by the Bank at the macro and sectoral levels before being taken up in the context of individual projects (para 37). At the moment, we are in the awkward position of asking for stringent real interest rate levels for medium or small farmers (already handicapped in some instances by adverse inter-sectoral terms of trade), while the country's banking system places no such burden on the industrial and commercial borrowers at higher income levels. We have also been baffled by an apparent lack of consistency in the policies in this respect as between regions and have been unable to explain to borrowers why indexing is more or less confined to the Bank's Latin American projects, though high inflation is not restricted to this region, even if it is more extensive here than in other regions. We, therefore, support the need for a more uniform approach (para 38).

9. We wonder if the reference to inflation in Peru (in para 60) as "moderate" is justified. According to Table III, shows ~~that~~ the GDP deflator shows an annual

percentage change of 15 for 1973-75. Though the annual rate of inflation has thus exceeded 9%, no action has yet been taken for reviewing the position and agreeing on new effective on-lending rates, as it was considered appropriate to review this issue along with the financial problems of the Banco Agropecuario on which correspondence is pending with the Peruvian authorities.

CRamasubbu:gj

Research General

Mr. Orville F. Grimes, Jr. March 18, 1976

Edward V.K. Jaycox

Research Committee Panel Meeting to Review Research - International Review Group on Population and Development

1. The review panel constituted to consider the subject research proposal met on March 15. Present were: E. Jaycox (chairman), M. Ahluwalia, C. Bruce, R. Grawe, and O. Nijhawan (members of the panel) and G. Baldwin, O. Grimes, B. King, and T. King.

2. The findings of the panel were:

a) While the population area is certainly of interest to the Bank, the specific outputs of this proposal are for the most part not clear, and apparently overlap in some degree with the work of the Berelsen committee reporting in July. Those that are fairly clear, i.e., identifying gaps in the stock of knowledge and priorities for research, are not clearly priority needs in the field.

b) The methodology to be followed is not spelled out and the scope of topics to be covered (Appendix B of Proposal) is so wide that it is not clear how useful "analytical frameworks" on the subjects can be expected.

3. The discussion which led to these negative findings was introduced by a discussion of what was expected from the Review Panel. As the proposal was presented with its various covering notes and by the supporting departments, it appeared that Mr. McNamara had already indicated agreement that the work should be undertaken, and, if so, that it should be financed from the Research budget. At the outset, and with the counsel of Mr. B. King, the panel decided that if the decision would depend only on the results of a technical review, the panel would judge the proposal on its merits, recognizing that given the long history and interagency nature of the deliberations which led to this proposal there may be many good reasons why a technical review may not be a ruling factor in this decision.

4. The main questions raised by the panel were:

a) Why is it that the gaps in knowledge and priorities for research are not well known in this field? Have not a number of comprehensive reviews by the Bank and others been conducted on this subject as recently as in preparation for the Bucharest conference?

b) If there are unidentified gaps in the stock of knowledge, why was it necessary to put together such a bureaucratic, high profile, approach to identifying these gaps? Were we inadvertently (or on purpose) setting up a permanent organization?

c) Were other outputs besides identified gaps and suggestions for research priorities expected? Were we more interested in the process than the outputs? What were the "analytical frameworks" that were expected?

5. On the first question, substantive work on identifying gaps and establishing priorities has in fact already been done. However, Bucharest and subsequent discussion had yielded no consensus on research priorities. There was no reason to believe, however, that the IRG could form such as consensus, and indeed the panel was not convinced of the need for such a consensus as a high priority to get on with research. There may, however, be more to this point than the panel was able to grasp. There was some indication in the proposal and in the presentation of it, that the composition of the team, led by arepresentative of the Third World, might somehow de-fuse the political issues involved with population and be able to be more persuasive generally. All this was very vague, however, and could not be pinned down. The question as to the need for such a bureaucratic response relates to this point, but again was not clarified. A regionally balanced group, with regionally based seminars was a positive point. But it was not very clear: whether the objective was to giveecredibility to the output, to root out regionally based experience/ knowledge heretofore not discovered, and/or to aid in dissemination of findings. The role of such seminars in promoting an indigenous research capacity in developing countries was therefore also uncertain.

6. This led to the question of multiple objectives. Was more expected of a substantial nature than identified gaps in knowledge and suggestions as to research priorities? It was emphasized that we should expect not only guidance on research priorities but also insights necessary for the Bank's operational work, in particular, how we might be more effective and convincing in our discussion with governments in this area. For the panel, this objective seemed to overlap strongly with the objectives of the Berelsen committee which is to report in July 1976. Also emphasized was the need to disseminate existing knowledge; this was stressed as possibly even more important than identifying research gaps/priorities. The panel questions whether this proposal constitutes an efficient mode of operation for disseminating existing knowledge. Only $40,000 is budgeted for four small regional seminars.

7. In general, the discussion as can be seen from what has been briefly set out above, was generally negative, all members of the panel concurring. After the chairman briefly summarized the panel's views, the discussion turned to how we might establish a mechanism whereby in future the staff obtains an agreed Bank position on proposals of this kind before expectations of other agencies are unduly raised. No conclusions were reached on this point, but perhaps a much earlier review by the Research Committee would be part of any answer.

Cleared with and cc: Panel Members

cc: Mr. Chenery
Mr. King (B)

EVKJaycox:ncp

Research file

Research Committee Members

March 18, 1976

Benjamin B. King, VPD Signed B. B. King

Optimality of Tax-Subsidy Intervention

This proposal was submitted yesterday, too late for possible consideration by a review panel before the meeting. There seem to be two courses of action the Committee might take:

(a) It could treat this as a forthcoming proposal to be reviewed in the normal manner and considered at the next meeting; or

(b) Given that the research is potentially useful and makes a small claim on the budget and that it would be helpful to have an early answer, recommend approval at this meeting, perhaps conditional on a favorable reaction from interested Bank staff.

The Committee's attention is drawn to a forthcoming proposal from the Agriculture and Rural Development Department, CPS (see the "Forthcoming Proposals" section) similar in some respects to this one.

Distribution

Messrs. Chenery, Avramovic, Balassa, B. de Vries, Dubey, Jaycox, Lerdau, Thalwitz, van der Tak, Vergin, Waelbroeck, Yudelman

cc: Mr. Grimes

OFGrimes:gm

NRIC

Research - General

Mr. B. B. King

March 17, 1976

E. Lerdau

Study of Andean Tariff Strategy

1. When you first took on your present job, you suggested in several conversations that the Research Committee eventually might play a more positive role than the mere vetting of proposals. You felt, that there might be occasions when the Operating Departments had concerns on which they felt that research could and should be done, although they were not in a position - because of limitations of intellect, time, experience, specialized skills or whatnot - to frame a research project themselves. The Research Committee - through you - might then become a broker and promoter, bringing together the consumer with the potential producers, i.e. might help to frame an actual research proposal responsive to the interests of the Operating Departments.

2. I told you at the time that I thought this was entirely the right approach and that I expected that the Operating Departments would be appreciative users of such a service, once they became aware of its potentialities.

3. I was therefore somewhat dismayed when you dismissed, in a recent conversation, the idea of a study of the Andean Group's common external tariff as "... not research, because it merely applies a known methodology (sic!)."

4. Now this particular stricture is applicable to most of our research to a greater or lesser degree, and I don't think that it is a good prime criterion for judging acceptability of proposals. Methodological pioneering is valuable for us when the subject to which it is applied is of interest to the Bank as a development institution, not for its own sake. Conversely, when the subject is of interest, the application of known techniques - say to data that are novel, or to test hypotheses that look promising, to help answer important questions - is entirely acceptable, to my mind. And I interpret the choices of the Research Committee as being entirely consistent with this thesis.

5. As for the study itself: clearly Mr. de Vries' attached note* on it is not a research proposal. But it is an indication that we have an important problem and want help in making it into a research project. The issue is important: some of the member countries are deeply concerned about the impact on their economies - particularly on their exports - of the high common external tariffs pressed for by others. The controversy will not be resolved soon; it was shelved for a year because no agreement could be found.

* NOT ATTACHED - DRAFT ONLY

6. It seems to me entirely suitable that the Bank help provide the factual and analytical framework needed to arrive at rational solutions. The Secretariate, which should be doing this, seems to lack the capability, and I do not deny that this poses some delicate problems of diplomacy, but these I think we can handle in the Region.

7. The study should be, to my mind, a "Balassa Model" study in the sense of having national researchers apply a common and centrally agreed upon method to answer a common set of questions. The Bank's role would be that of the central focal point.

8. I would be grateful for an opportunity to discuss this in more detail with you and Mr. Balassa.

cc: Messrs. Krieger, o/r
Balassa
Quijano
de Vries
Pfeffermann/Nowicki

ELerdau:jd

Research General

Messrs. Stone and Lethbridge

March 16, 1976

George Beier

Some Research Ideas - Small Business

1. Mr. Loeschener suggested the following possibilities for research in small business, all of them intended to have immediate effect on project preparation.

(a) Role of Curb Market in Small Enterprise Development

(i) Purpose - to extend our institutional knowledge of the operation of informal money markets, with the idea of placing loans with curb market as retailer.

(ii) Place - Selected countries where curb market is very active and where our background knowledge is best developed (See V. V. Bhatt, fiscal division DPS)

(iii) Cost - ½ man year

(b) Preliminary study of Technology Referral Service

(i) Purpose - To survey the available technology advice and institutions delivering it. (CIDA and ITDG)

(ii) Cost - ¼ man year.

(c) Designing and Testing Technology Delivery Service

(i) Purpose: (1) Following on (b) prepare a DFC project including a major technology advice technical assistance component.

(2) Train Bank staff in methods.

(ii) Place - Any large and varied DFC project

(iii) Cost - ½ man year.

(d) Cost and Risk Factors in Lending to Small Scale Enterprises

(i) Purpose - To associate enterprise characteristics with probability of success and thus reduce risk of default and high cost on account of bad debt. To study systematically the relation between enterprise characteristics and costs of lending.

(ii) Place: Desk Study (Bank) plus field trips to follow up on post Bank DFC projects in two or three countries.

(iii) Cost - 3/4 man year

(e) Factors Influencing Enterpreneurial Development

(i) Purpose - Desk survey of literature. Establish liaison with ILO for possible field involvement of Bank staff.

(ii) Place: Bank, ILO

(iii) Cost - 2 man months

2. In addition to these reasonably managable topics, two open ended research "fields" were suggested. The first, research into indirect employment effects of projects, would build from the current effort in this field (primarily an input/output exercise) in some still obscure way. The second, research into the government policy support needed for small enterprises, is still less defined. In principle, it should be possible to study parts of the problem in connection with some of our other work; e.g., in the study of the municipal fiscal effects of Bank urban projects and the effects of the municipal fist on Bank projects, we might well include a special look at DFC projects within one of the cities studied.

3. The whole list of research topics outlined above was discussed in the context of a (hoped for) research capacity in this department which has since fallen through. Nevertheless, some of these subjects seem managable and interesting enough to consider following through on them with our truncated staff.

GBeier:bb

cc: Jaycox, Dunkerley, Churchill

Research

DPS Senior Advisory Group March 15, 1976

Orville F. Grimes, Jr., VPD

Meeting on March 10, 1976

1. The Advisory Group on DPS Research held its initial meeting on March 10, 1976. The Group felt that its major aims will be:

- to give internal guidance on research priorities within the DPS;
- to take advantage of the overlap in skills and experience among senior staff by providing a wider audience for communication that is already going on;
- to identify important research topics for DPS Departments.

Rather than evaluating Department research programs or elaborating a DPS-wide research program, the Group sees its role as primarily a technical one of exchanging views about the progress of Bank research topic by topic. Initially, the Group will examine subjects on which work is already underway and for which the results have not yet fully entered the phase of practical application.

2. The following were suggested as priority topics for future meetings of the Group:

a) income distribution;
b) global modelling, including links with commodity models;
c) labor markets and employment;
d) foreign trade;
e) social accounting frameworks and economy-wide models;
f) urbanization;
g) rural development;
h) price policy and subsidies, in agriculture and other sectors;
i) resource mobilization;
j) population.

The first topic, income distribution, will be the subject of a meeting on Monday, March 15. Additional meetings are tentatively scheduled to discuss global modelling (early April) and labor markets (late April).

Cleared with and cc: Messrs. Chenery, B. B. King
Distribution:
Messrs. Karaosmanoglu
Pyatt
Waelbroeck
Little

cc: Messrs. Gulhati
Tims
Haq
Muller
Duloy

Research General

Mr. Douglas H. Keare, ECDRB

March 12, 1976

Benjamin B. King, VPD Signed B. B. King

City Study

1. The relation between this proposal and the Bank's overall program of urban research is, as we have discussed, still not clear. We should be better equipped to evaluate this link when a revised draft of Ardy Stoutjesdijk's urban research outline becomes available. In the meantime, it might be useful to arrange a meeting within the next two weeks or so to sharpen the project's objectives and to expose with more precision the methodology that can be explored with one or more of the candidate cities. This meeting would give all interested Bank staff a chance to meet with the project proposers -- including, I hope, Jerry Rothenberg -- for an exchange of views.

2. A question which we have discussed with Hollis Chenery, is whether Phase II should not be broken up into two subphases. The first would be a relatively low-key attempt to outline how the proposed methodology might be applied to a particular city without prejudice to the final choice. Since the process of research design is described as iterative (page 16), this in effect means reviewing the project at a stage of iteration which would suffice to demonstrate how the methodology would be developed. If it was then decided to proceed, the second subphase would essentially consist of carrying out the present Phase II, hopefully drawing on the experience gained in the first subphase. In this regard I think it may be desirable to establish a small advisory group which would concern itself especially with the methodological questions and the selection of consultants.

3. This approach has two advantages. The first is that it might give an opportunity to break the present impasse, in which the proposers inherently have difficulty in satisfying those who are skeptical about urban models that they have something different to offer. The second is that fuller commitment to a particular city runs the risk of being faced with a dilemma, if the project were to be judged at the end of Phase II to be unsatisfactory: disappointment at discontinuance on the one hand; or continuance based too much on the fact of commitment on the other.

4. There are, of course, some costs to this more cautious approach. It may be more difficult to recruit a team. If there is a decision to switch cities, some work may be lost. These will have to be weighed against the benefits.

cc: Messrs. Chenery
Grimes
Gulhati
Avramovic
Little
Renaud
Duloy
Stoutjesdijk
Jaycox
Churchill

OFGrimes:BBKing:gm

Research General

March 12, 1976

Dr. William Miernyk
Regional Research Institute
West Virginia University
Morgantown, West Virginia 26506

Dear Bill:'

At long last a response to the outline which you sent to us on January 27. I apologize for the delay but both Jerry and I were out of the country for a week or two and there was some delay in soliciting comments on the document which you sent.

Basically, we feel the outline is quite good and addresses the problem as we see it. The only negative comments which we received were that while the general problem of measuring employment impacts was well covered, it did not appear that the specific problem of "public utility" employment linkages in LDC's would be addressed in any detail. Therefore, the suggestion would be that when writing the somewhat larger paper, to the extent that you can make suggestions on means by which it might be possible to go from the general case to specific public utility (water and wastes, power, telecommunications) applications you should do so. Of course, as we previously discussed an exercise of that type is quite difficult and there may not be much of a substantive nature to say about it.

With this added comment we hope you will have the time to go ahead and write the paper generally along the lines which you outlined, and under the terms which we discussed. I will be in Canada next week and Jerry is off to Zambia but we will be in touch with you upon our return.

I hope all is well with you, Mary and the rest of the family in Morgantown. Here in Washington we are eagerly awaiting Spring.

Sincerely,

Robert J. Saunders
Senior Economist
Public Utilities Dept.

RJSaunders:mds

✓ Research General
" Transportation & Urban Dev.

Mr. Edward V. K. Jaycox March 10, 1976

A. A. Walters

Berkeley and UCLA--Urban and Transport Research
Back to Office Report

1. Institute for Urban and Regional Studies, Berkeley

The research in the Institute is mainly concerned with applications of existing techniques to problems of public interest; they are not much concerned with fundamental research into techniques or into such matters as the methodology of urban modeling. The Institute is heavily policy-oriented. And much of their transport work is concerned with the Bay area--particularly BART and alternatives such as bus schemes. However, the work is of quite a high standard. T.F. Keeler is one of the leading economists and he seems to be highly competent in the typical comparison of cost study that we are concerned with in the Bank. The main conclusion is the superiority of the bus--especially over the metro-rail systems.

2. Department of Economics, Berkeley

From the Bank's point of view the most important work there is by Daniel McFadden mainly on the value of time. This is a rather complicated logit analysis of data which mainly arise from the various BART studies. The preliminary results from these studies imply values of time for the United States of circa $3 for traveling time and circa $9 for waiting time. The Bank may like to consider replication of this analysis in a developing country.

The main contribution of McFadden and his associates is statistical rather than conceptual. We should not expect too much; but it should provide a much improved way of dealing with the data.

3. Department of Civil Engineering, Berkeley

The center for studies of traffic restraint and related issues is in the Department of Civil Engineering under the general leadership of Professor (Bill) Garrison. There is a major DOT financed program on broadly "coming to terms with the motor car." The work of Professor Adolf May is particularly noteworthy. He has studied restraint schemes in detail and has many students working on related projects.

4. Department of Economics, UCLA

The department is renowned (and rightly so) for its studies of property rights and their economic and legal implications. The best man in this field is Harold Demsetz--but there are many others. Probably the most interesting work is that of Steven Cheung on forms of tenure and its effects. His book on rent control in Hong Kong seems to develop the analysis in an area which has been so far neglected by the Bank. It is clear however that

all these people (and particularly Demsetz) are very heavily committed.

It might be advisable to carry out legal and economic analysis of the proposed squatter settlement policies to see exactly what the implications are likely to be. The Demsetz-Cheung approach would be most useful here.

The economics of transport at UCLA is primarily represented by George Hilton. His studies have been mainly concerned with the effects of regulation, on the one hand, and the basic industrial organization (size of firm, etc.) on the other. His work confirms much of what is already known and is of only peripheral interest to the Bank.

AW
AAWalters:be

Yellow
Research General

The World Bank / 1818 H Street, N.W., Washington, D.C. 20433, U.S.A. • Telephone: (202) 393-6360 • Cables: INTBAFRAD

March 10, 1976

Mr. Fritz A. Steuber
World Bank
66 Avenue d'Iena
75116 Paris, France

Dear Mr. Steuber:

The attached letter was recently sent to the Bank's Resident Missions. The lists of research institutions mentioned on page 2 are the same as the ones I recently submitted to the Regional Chief Economists for comment and amendment; your memorandum to Mr. King of February 17 refers to the European list.

Clearly we cannot and would not ask you to judge the quality of research being undertaken throughout Europe. But one small piece of the problem could, I hope, be addressed without much bother. At the Board discussion of Bank research in January, Mr. Wahl suggested that more attention should be given to collaboration with research agencies in France, the Netherlands, Germany, and elsewhere in Western Europe. Jean Waelbroeck, Ardy Stoutjesdijk and others have maintained good relations with Dutch and Belgian institutions particularly, but our knowledge of research capacity among French groups can stand a good deal of improvement. We therefore hope that you will consider this request as applying predominantly to France, and cover other countries only as and when you have time. If possible, we would much appreciate a reply by the end of this month.

Yours sincerely,

Orville F. Grimes, Jr.

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Attachment

Cleared with and cc: Mr. B. B. King, VPD
cc: Mr. J. Carriere, European Office
Mr. O. Myhrer, " "

Research General

The World Bank / 1818 H Street, N.W., Washington, D.C. 20433, U.S.A. • Telephone: (202) 393-6360 • Cables: INTBAFRAD

March 4, 1976

Mr. Jean P. Carriere, Director
World Bank European Office
66 Avenue d'Iena
75116 Paris, France

Dear Mr Carrière

Enclosed are two copies of the annual report on Bank research discussed at a recent Board meeting. We have initiated a program to evaluate the usefulness of completed research projects, and describe results of the first 25 or so in Part III of this report. Another feature new this year is the attempt in Part II to cover important studies going on outside the formal research program, in addition to current projects financed from the External Research budget. Also enclosed is an updated version of the Abstracts of Current Studies.

This year as well as last, questions arose about the degree to which research projects are formulated using local research institutions mainly or exclusively to carry out the work. But this question was also seen in a wider context, as in one remark that even many European countries appeared to be underrepresented among the agencies with which we collaborate. A related but narrower issue concerns the list of institutions with which we exchange research information: to what extent is it representative of the overall research capacity in a given area? Which institutions presently not members should be added to the list?

In response to our own feelings on this as well as the Board's, we have asked the Regional Chief Economists to supply the names of the main centers of analysis and information in each country -- whether a university department, research institute, the government statistical office or whatever. In consultation with the Regional Offices and the Resident Missions, we would then explore ways of initiating and maintaining contacts with these agencies and perhaps adding them to the documents exchange list. These consultations have, in at least one case, already begun.

The attached list of research institutions for your area is a preliminary try at comprehensiveness, though not, at this point, at assessing differences in quality. If you feel that there are glaring errors or omissions, or are aware that certain high-caliber institutions desire closer contact with the Bank, I would much appreciate your letting us know.

Yours sincerely,

Benjamin B. King
Research Adviser
Development Policy

Enclosures

RESEARCH INSTITUTIONS

EMENA Region

1. Institut des Techniques de Planification et d'Economie Appliquee, Algiers, Algeria

2. United Nations Industrial Development Organization, Vienna, Austria*

3. Vienna Institute for Development, Austria*

4. Institute for Development Research, Copenhagen, Denmark*

5. Centre of International Economic Relations, Institute of National Planning, Cairo, Egypt

6. Institute de Recherches en Economie de la Production, Paris, France*

7. OECD Development Centre, Paris France*

8. Friedrich-Ebert-Stiftung Forschungsinstitut, Bonn, Germany*

9. German Development Institute, Berlin, Germany*

10. IFO Institut für Wirtschaftsforschung, African Studies Centre, Munich, Germany*

11. Institute for Scientific Cooperation, Tubingen, Germany*

12. Institut fur Allgemeine Überseeforschung, Hamburg, Germany*

13. Research Institute for International Techno-Economic Cooperation, Aachen, Germany*

14. South Asia Institute, University of Heidelberg, Germany*

15. Institute for World Economics, Hungarian Academy of Sciences, Budapest, Hungary*

16. Economic Research Institute, University of Tehran, Iran*

17. FINAFRICA, Centro per l'assistenza finanziaria ai Paesi Africani, Milan, Italy*

18. Istituto di Studi per lo Sviluppo Economico, Naples, Italy*

19. Scuola di Sviluppo Economico, Rome, Italy*

20. Institut National de Statistique et d'Economie Appliquee, Rabat, Morocco

21. Faculty of Economics, Kuwait University, Kuwait, Republic of Kuwait

22. Institute of Social Studies, Resource Development Department, The Hague, Netherlands*

23. The Chr. Michelsen Institute, Bergen, Norway*

24. The Central School of Planning & Statistics, Research Institute for Developing Countries, Warsaw, Poland*

25. Institute for International Economic Studies, University of Stockholm, Sweden*

26. Centre National de Recherches Economiques et Sociales, Tunis, Tunisia

27. Belgrade Foreign Trade Research Institute, Belgrade, Yugoslavia

28. Center for Studies on Developing Countries, University of Ljubljana, Yugoslavia

29. Zagreb Institute for Developing Countries, Zagreb, Yugoslavia

Research General

No. 21

Bogotá, March 9, 1976

Mr. Benjamin B. King
Research Adviser
Development Policy
I.B.R.D.
1818 H. Street, N.W.
WASHINGTON, D.C. 20433

Dear Mr. King:

I refer to your letter of March 4 concerning research centers in developing countries. Those included for Colombia seem to me the most appropriate ones. However, I shall keep the matter under review and will let you know of any others which should be included.

Yours sincerely,

Ian A. Scott
Resident Representative

Research gm

Those listed below

March 8, 1976

Orville F. Grimes, Jr., VPD

Review Panel: International Review Group on Population and Development

1. A panel consisting of Messrs. E.V.K. Jaycox (Chairman), M. Ahluwalia, C. Bruce, O. M. Nijhawan, and H. Pilvin will review the attached research proposal on Monday, March 15, 1976 at 11:00 a.m. in Room D556.

2. As is customary, the panel should seek answers to questions like (a) Are the issues raised by the research of interest to the Bank? and (b) Is the study so designed as to deal meaningfully with these issues? To aid in considering these questions, some informal guidelines for review panels are attached. An earlier but substantially similar version of this proposal was sent to Research Committee members last week for information and comment; the reactions of Messrs. Waelbroeck and Yudelman are attached.

3. The recommendations of the panel should be sent to me by Wednesday, March 17.

Attachments

Distribution

Messrs. Jaycox, Ahluwalia, Bruce, Nijhawan, Pilvin
cc: Messrs. Gulhati, Little, T. King, Zachariah
Messrs. Kanagaratnam, Baldwin

OFGrimes:gm

✓ Research general re Colombia

#20.

Alberto Favilla, Chief Division 2 B LAC

March 5,1976

Carlos N.Quijano, Bogotá Office

COLOMBIA- Clearance for Research on Colombia.

Regarding our recent telephone conversation and in reference to a memorandum addressed to Mr. J.F. Linn by Mr.Jaspersen on the above subject, I would like to clarify, first, the Government's policy on the publication of Bank research on Colombia and, second, the modus operandi followed by the Bogotá Office in previous occasions. Eventhough the Minister of Finance has stated that he does not intent to limit the publication of Bank research on Colombia, he has also stated that, of course, the government cannot be responsible for the data or conclusions of the research. On that basis I have made it a point to obtain clearance from the Minister of Finance or other interested parties on a case by case basis. In the particular case of "The Distributive Effects of Local Government in Colombia; a Review of the Evidence" I have sent the Minister a copy of the study but I have not had the opportunity to obtain his approval. I have discussed this subject with Ian Scott and I suggested that he should bring this matter up with Miguel Urrutia and until he communicates his findings to you, distribution of the report outside the Bank should be limited.

cc.I.Scott
F.Jaspersen
J.F. Linn

Carlos Quijano-tea.

Research General

Mr. Benjamin King, VPD

March 5, 1976

Luis de Azcarate, WANVP

Research Institutions

1. The list you sent us for Western Africa does cover those institutions that we think are worthwhile in a way or another. Attached is a comment by H. Bachmann on ORSTOM, but I know that several units in the Bank already have a working relationship with this institution whose main specialization is in "human sciences" (Ethnography, Sociology, Population, Migration, etc.) rather than economics. Perhaps you may want to add to your list the research departments of the two regional central banks: (a) Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) and (b) Banque Centrale des Etats de l'Afrique Centrale (BCEAC); their headquarters are still in Paris, 29 Rue du Colisée, Paris 8ème. BCEAO is the stronger of the two institutions and I would suggest you send any correspondence too Mr. Ouattara, Directeur des Etudes.

2. As you probably know our contacts with research institutions in West Africa are rather limited, the main reason being that most of these university institutes are generally not in the good graces of their respective governments. As you know also the African Institute for Economic Development and Planning, in Dakar, is a UN institution and its director, Professor Samir Amin, has a strong Marxian bias (incidently if some day we want to have an unorthodox view of African development it would be nice to invite Samir Amin to a seminar in the Bank). The Société d'Etudes et de Développement, Ouagadougou, Upper Volta is, as far as I know, a very small private outfit; I do not think they have reached the standards of the other institutions in your list, but one can be hopeful perhaps, and it may be advisable to establish or maintain relations with them. We could ask for more information on this one to our resident representative in Ouagadougou.

3. The Development Research Center of the Bank has had working relationship with both the Ivory Coast institution and one or several of those in Ghana; the Center is in a much better position than we are to give you an assessment of their activities.

cc: Senior Economists, WAN

LdeAzcarate/lm

Research General

March 4, 1976

The following letter was sent to all the Bank's Resident Missions excluding the London and UN Offices.

Dear

Enclosed are two copies of the annual report on Bank research discussed at a recent Board meeting. We have initiated a program to evaluate the usefulness of completed research projects, and describe results of the first 25 or so in Part III of this report. Another feature new this year is the attempt in Part II to cover important studies going on outside the formal research program, in addition to current projects financed from the External Research budget. Also enclosed is an updated version of the Abstracts of Current Studies.

This year as well as last, questions arose about the degree to which research projects are formulated using local research institutions mainly or exclusively to carry out the work. But this question was also seen in a wider context, as in one remark that even many European countries appeared to be underrepresented among the agencies with which we collaborate. A related but narrower issue concerns the list of institutions with which we exchange research information: to what extent is it representative of the overall research capacity in a given area? Which institutions presently not members should be added to the list?

In response to our own feelings on this as well as the Board's, we have asked the Regional Chief Economists to supply the names of the main centers of analysis and information in each country -- whether a university department, research institute, the government statistical office or whatever. In consultation with the Regional Offices and the Resident Missions, we would then explore ways of initiating and maintaining contacts with these agencies and perhaps adding them to the documents exchange list. These consultations have, in at least one case, already begun.

The attached list of research institutions for your area is a preliminary try at comprehensiveness, though not, at this point, at assessing differences in quality. If you feel that there are glaring errors or omissions, or are aware that certain high-caliber institutions desire closer contact with the Bank, I would much appreciate your letting us know.

Yours sincerely,

Signed B. B. King

Benjamin B. King
Research Adviser
Development Policy

Enclosures - See King's memo of Feb. 12 to Regional Chief Economists

BBKing:
OFGrimes:gm

Research General
F244

Mr. Barend A. de Vries, Chief Economist, LAC, RVP March 4, 1976

Colin Bruce, Chief, AGPER

Agricultural Prices and Subsidies

1. Further to the January 21, 1976 memorandum on the subject from Messrs. Yudelman and Chernick, and your own of January 22, I am pleased to inform you that we are making arrangements for a first country case study of Argentina to be undertaken immediately. The decision was made because an eminently qualified consultant, Mr. Lucio Reca, became unexpectedly available to conduct the study of a country where agricultural incentives have played a key role in its overall growth and development during the past three decades.

2. We propose to undertake a second case study dealing with Colombia next fall. Regarding Peru and Mexico, we propose for the time being to draw on the ongoing and planned work on the subject by your Regional Departments and the DRC.

3. Within a few days, I shall send you a revised draft of the scope, methodology and outline of the case studies, as well as the proposed work program, for your consideration and comment.

cc: Messrs. Yudelman, Burki/Brown

MBallesteros:mt

Research - General

Mr. K. Takeuchi - EPDCD

March 4, 1976

L. Hartsell Cash - NDPD2

Commodities Research Unit (Consolidated Research Inc.)

1. This memorandum is being written to confirm the recent discussions which I have held with you and Gerhard Thiebach concerning the possibility of employing this firm as consultants for the Bank. These were generally in the context of the letter of January 30 from Mr. Perlman making a proposal to the Bank as well as your handwritten note attached thereto indicating that you felt, if the Bank wished to enter into such a contract, that the cost should be split among Economic Projections - $10,000, Industrial Projects - $10,000 and IFC - $5,000.

2. As you know, during the discussions in January with Mr. Perlman and his associates, we raised the question of our project work and it was our feeling that Mr. Perlman and his associates were somewhat overstating the closeness of their relations with people in the industry and of their own overall capabilities. After talking to our mining engineers and others associated in mining projects here I think our general opinion is that this is indeed a very good firm; nevertheless, we feel that on particular metals there are other available firms within the industry which are equally competent.

3. You will recall that we received on February 10 a letter from U.S. Steel which indicated that, in the case of their specific nickel project in Indonesia, the CRU had specifically informed U.S. Steel that they could not show us the nickel report prepared by CRU. U.S. Steel was, of course, very upset by this attitude of CRU inasmuch as they had felt that they were getting a study which they could show to not only the World Bank but other financial institutions interested in participating in the project. The position of CRU is that this report is copyrighted and may not be shown to the World Bank. They feel that the conclusions of the report may be made available to the Bank and that individuals from CRU would be available on a "reasonable basis" to answer such questions as we might have regarding their studies of nickel.

4. As discussed with you we have serious reservations about obtaining information on specific metals from CRU for project work, since the end result is, of course, a specific report on the metal market within our appraisal report, which receives rather wide circulation. It is the opinion of many that CRU is being rather greedy in trying to be paid two and three times for the same work and this is the basic reason behind their unusual attitude.

5. Another reason why my own mining engineers, and myself as well, question the advisability of entering into a full contract with CRU is that we feel that it would in time weaken our own relations with people within the industry since CRU would be purporting to speak as the World Bank's consultants to the same people. We feel that the continuance of our efforts to build up good contacts within various companies is an important one and we would like to continue this.

6. The financial aspects of their proposals seem to be very imposing but we frankly are not very impressed when we have to pay $500 per day for one of their men for seminars, research, advice. This seems to us to be exceedingly high and we think that good people can be obtained from other sources much cheaper. After the use of the basic 20 man-days for $10,000 we get what is a bargain basement price of only $375 for work over and above that. Again we would argue that this itself is not a cheap price as such.

7. As you know we now get the Oppenheimer Aluminium reports and so we clearly do not need any assistance in that particular field. While CRU has done some iron ore studies I doubt if they have expertise anyone else does not have since they really do not follow the steel market as such. They indicated they would like to get into the steel in the future but to date they have only done non-ferrous work to any extent. We have recently reviewed the qualifications of other firms within the mining industry and we are not at all sure that we can't get the same expertise on contract from other firms at cheaper prices. In addition we think that we probably could get Commodities Research much cheaper if we let them know that, when we needed a report on a specific metal, we are getting competitive offers both from them and from others within the industry such as RTZ, Seltrast, etc.

8. We will be happy to discuss the above with you at your convenience. Nevertheless, as indicated previously to you, we think it would be a serious tactical mistake to rush into a contract with Commodities Research Unit based on the skimpy information which they have furnished so far regarding their own copyright views, the alternative sources of the same information, and their reluctance to provide full data on the alleged advantages of their copper model over others currently available.

cc. Messrs. Fuchs, Lorenz/McDowell/Haug, Thiebach, Hartigan (IFC)

LHCash/cl

Research gen

Mr. B. de Vries, LAC

March 2, 1976

Benjamin B. King, VPD Signed B. B. King

Andean Tariff Strategy Study

1. While I have no doubt that the proposed study is important to the Andean group, I find it difficult to accept the notion that it falls within the scope of the Research Committee. The latter does not finance studies which answer a country-specific or project-specific operational question even though they may involve the application of research methodologies previously developed. This does not mean, of course, that the DPS will not assist in planning and recruiting for such studies. Indeed, in this case some effort has, I understand, already been made.

2. The critical question is plainly a budgetary one. If, for whatever reason, a Regional Office wishes to undertake a special study for its own purposes or to assist its member countries or some combination thereof, under present procedures it appear to have only limited resources to finance the study. The Andean case is not the only one; the problem threatens to become Bank-wide.

3. This problem should be met head on. It is not going to be much use to anyone to engage in theological arguments about what is research and what isn't. The Research budget could, in any case, make only a marginal difference. What is needed is some special financial resource for this purpose, as has been agreed with CPS for the monitoring of projects which cannot be financed out of loans or credits. This question will presumably have to be raised by the Regional Offices.

4. While the general problem appears to be the main issue, I do have a question or two about this specific study. Who asked for it and how? What discussion has there been of the participation in the study by the Andean group, in terms of both manpower and finance? The group isn't exactly oil-poor.

cc: Messrs. Chenery*
Karaosmanoglu*
Duloy*
Balassa
Grimes
Lerdau
Please *

*with attachment

BBKing:gm

STUDY OF ANDEAN TARIFF STRATEGY

The arrangements for the Andean Group (Bolivia, Chile, Colombia, Ecuador, Peru and Venezuela) envisage the establishment of a common external tariff and an agreement on the location and product mix of a number of key industries. Agreement on programming has been reached for certain industries but the level of the common external tariff still remains under debate and study. In the deliberations of the Andean Group late last year a division was apparent between two groups with Chile and Colombia favoring a relatively low tariff and open economies and the other countries placing greater reliance on industrial programming even if this entailed high industrial protection. In the end a compromise was worked out whereby the introduction of the common tariff was postponed by 18 months during which, it was hoped, industrial programming agreements could be completed for the remaining sectors (notably the automotive industry and steel; the sectors already completed are petrochemicals and metal mechanics).

Among the countries favoring a low tariff, Colombia fears that eventual agreement on the automotive industry, for example, may require extensive levels of protection. High tariffs for trucks would unduly increase the cost to the small farmers --and this in turn would prejudice Colombia's policy of stimulating exports and production of the rural sector where many of Colombia's poor are located. The Colombians feel that in considering an appropriate regional tariff policy, one would have to consider various trade-offs: emphasis on industrial production versus agriculture, or promoting large industries versus assisting small farmers; import substitution versus export promotion; loosing export markets in the OECD countries versus gaining easier access to Andean markets. Other countries, however, would have a different approach to the issues posed by alternative tariff policies; for

example, Peru would give greater emphasis to the changes in ownership and structure of industry and the feasibility of producing a high level of export earnings from mineral exploitation which is less dependent on protection policy.

The study would consider the appropriate level and structure of the regional tariff as seen from the viewpoint of the different policy objectives and characteristics of the Andean countries (importance of agriculture, state of industrial development, resource endowment, access to transport routes, etc.). The study would also consider the consequences of low and high tariff strategies and the feasibility of establishing a maximum protection level beyond which no regional industries would be permitted. Furthermore, the study would analyze what the tariff strategies imply for the programming of one or more of the industrial sectors still to be covered, in particular the automotive industry. In turn it would consider the cost of different levels of protection, for example, of trucks to the consumers, to specific sectors strategic to the country's development and the economy as a whole. The study might consider the possibility of introducing a range of tariff rates for the industries subject to regional programming -with, for example, Bolivia applying a 50% protection to a domestic industry, but Colombia not permitting protection above 30%.

The study itself should preferably adopt an agreed methodology, involve empirical analysis, while simultaneously addressing itself to key problems of concern to the countries. Initially, it might cover only part of the countries, say, Venezuela, Chile, Colombia and Peru, and one of the industrial sectors, say the automotive industry.

It is envisaged that the study would be initiated by an exploratory mission in April 1976 to the countries to be covered with the objective of (a) identifying the questions of particular interest to the different countries in the analysis of the effects of the alternative tariff strategies, and (b) determining the research support available in the country. This

initial mission would prepare a detailed proposal for the study. At present it is assumed that the study will be carried out in six months (July-December 1976) so as to be useful in the deliberations of the Andean Group. A budget estimate for the study (excluding the initial mission) is attached.

att.

February 25, 1976

| | | |
|---|---|---|
| 5 Senior Economists | 30 | man-month |
| 5 Research Assistants | 30 | man-month (local hire) |
| 1 Bank staff | | |

Consultant Fee

| | | |
|---|---|---|
| Economists: $150 per day x 30 mm x 26 days | = | $117,000 |
| Research Assistant: $50 per day x 30 mm x 26 days | = | $ 39,000 |
| Total Consultant Fee | | $156,000 |

Travel

Air Fare

| | | |
|---|---|---|
| Economists: 4 x 2 trips x $795 average cost per trip (Peru, Chile, Colombia, Venezuela) | = | $6,360 |
| Senior Economist: 1 x 1 trip x $1,500 (travelling to the farthest point Chile adjusted to accommodate stops in Peru, Colombia and Venezuela) | | $1,500 |
| Senior Economist from Israel to Washington, D.C. 2 trips x $1,890 | = | $3,780 |
| Bank staff: 3 trips x $795 | = | $2,385 |
| Air Fare Total | | $14,025 |

Per Diem

| | | |
|---|---|---|
| Economists: 4 x 2 mm x 26 days x $55 per day | = | $11,440 |
| Senior Economist: 1 x 6 mm x 26 days x $55 per day | = | 8,580 |
| Bank staff: 1 x 26 days x $55 per day | = | 1,430 |
| Per Diem Total | | $21,450 |
| Travel Total | | $35,475 |
| Estimated Total Cost of Project | | $191,475 |

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

# OFFICE MEMORANDUM

Research Gen

TO: Those listed below

DATE: March 2, 1976

FROM: Orville F. Grimes, Jr., VPD

SUBJECT: Review Panel: Asian Data on Income Distribution

1. The panel will meet to review the progress of this project and entertain a proposal for additional funding on Monday, March 8, 1976 at 11:00 a.m. in Room D461.

2. A proposal revised along the lines of yesterday's discussion is scheduled to be available by late Thursday, and will be distributed at that time. Meanwhile, to aid in considering the proposal some informal guidelines for review panels are attached.

Attachment

Distribution

Messrs. Waelbroeck
Jansen
Meerman
D.C. Rao (w/o att.)

Messrs. Duloy (w/o att.)
Pyatt ( " " )
Ahluwalia ( " " )
Mrs. Chiswick ( " " )

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

# OFFICE MEMORANDUM

TO: Those listed below

DATE: March 26, 1975

FROM: B. B. King, Development Policy BBK

SUBJECT: Informal Guidelines for Panels Reviewing Research Proposals

Research proposals are reviewed by a panel of staff members before being considered by the Research Committee. The attached note specifies the procedure and content of this review. As such, it is of interest to those preparing research proposals for submission to the Research Committee.

Could you please ensure that a copy of these guidelines reaches all those who are preparing, or might prepare, research proposals.

Attachment

Distribution

Directors, Deputy Directors, Advisors and Division Chiefs in DPS and CPS.
Regional Office Directors, Deputy Directors, Assistant Directors, Assistants to Directors, Chief Economists and Senior Economists.
Members of the Research Committee

March 26, 1975

# INFORMAL GUIDELINES FOR PANELS REVIEWING RESEARCH PROPOSALS

The guidelines are presented in two parts: (A) Procedure and (B) Substance.

## A. Procedure

1. The Secretary to the Research Committee will arrange for a panel to review research proposals before consideration by the Research Committee.

2. The Chairman of the Panel will, in general, be a member of the Research Committee. Members of the panel will, in general, be two or three Bank staff members with relevant interests and qualifications.

3. The panel will have one or more meetings with the principal researchers to discuss the research proposal. The principal researcher or the panel may invite other researchers and research supervisors (e.g. department director, division chief, etc.) to attend this meeting. The Secretary to the Research Committee may participate in this discussion but is not a member of the review panel.

4. The review panel will submit a memorandum to the Secretary to the Research Committee containing its recommendations concerning the financing of the research proposal and the reasons for its recommendations. The review panel may also suggest modifications of the research proposal, after discussing these suggestions with the originators of the research proposal.

5. The originators of the research proposal may submit a rebuttal to, or a member of the review panel may submit a dissent from, the panel recommendation. Such memoranda should be sent to the Secretary to the Research Committee.

6. The Secretary to the Research Committee will forward the research proposal, panel recommendations and subsequent memoranda to the Research Committee for their consideration.

NOTE: General information concerning the Bank's research program can be had from Bank Group Research Program, January 8, 1975. (For copies call Ext. 5001).
Brief descriptions of ongoing research projects are published in World Bank Research Program: Abstracts of Current Studies, October 1974. (For copies call Ext. 2057).
General enquiries concerning the research program should be addressed to the Secretary to the Research Committee (Ext. 6003); queries on particular research projects to the departments responsible.

B. Substance

Members of the review panel should feel free to discuss all aspects of the research proposal with the originators of the proposal and with whomsoever they wish to consult. They may call upon the Secretary to the Research Committee for any assistance.

The following is a check list of items/questions to assist the panel in its assessment of a research proposal. Originators of research proposals are well advised to cover these points in the proposal itself, where appropriate.

1. Objectives

a) What is the problem to which the proposal is addressed? Is the justification for this research more solid than an assertion that "there is a need to know more" about the topic? What precisely is the use of this research to the Bank, member governments or anyone else?

b) What are the hypotheses? i.e. what is it expected to prove or disprove?

c) Is the subject of research of general interest, rather than something specific (e.g. Information gathering relating to a single sector in a single country) which should be done as part of operations?

2. Opportunity Cost of the Proposed Research

a) Has the Research Committee considered an "overview" of the subject?* If so, does the proposal conform with the priority guidelines agreed to?

b) If no overview has been considered by the Research Committee, does the proposal have a discussion of what research is being done elsewhere in this field and how the proposed research relates to it?

c) Why is the subject of the proposed research particularly important in relation to other possible research in the same broad field?

* Ideally, an overview would: (i) identify the nature of the problems that we are trying to solve in the real world; (ii) identify those lines of research which, on the face of it, are already mining low grade ore; (iii) identify those lines of research which might have a higher pay-off; (iv) identify which of the lines in (iii) are particularly suitable for the Bank.

3. Technical Competence

a) Is the methodology appropriate to the defined objectives?

b) Are the staff and consultants properly qualified?

c) Is there adequate Bank staff time allocated to supervising hired consultants?

4. Phasing

a) What are the points at which the progress of the project can be reviewed by the Research Committee to determine whether the project deserves continued financing? If the research proposal does not clearly identify these phases, the review panel ought to do so.

b) Is it clear from the proposal precisely what the output of each phase of the research is going to be?

c) Are there additional intermediate outputs that should be required of the researchers?

5. Departmental Coordination

Has the research proposal been seen by the relevant departments in the Bank and IFC, as signified by their having signed Part II of the research proposal form? For pragmatic reasons, signatures on the form should be interpreted simply as signifying awareness of the proposal. If departments feel strongly for or against a proposal, they ought to feel motivated enough to write a memorandum expressing their views.

6. Choice of Countries

a) Is the choice of countries appropriate in relation to (i) relevance of problems; (ii) availability of information/collaborators; (iii) desirability of avoiding excessive geographical concentration of research projects; (iv) Bank/country relations.

b) Have steps been taken to exploit interrelationships between this research proposal and other research projects in the same subject or country? (The booklet Abstracts of Current Studies, which has a table of contents by subject and an index by countries, provides relevant information).

7. Collaboration

a) What is the extent of collaboration with researchers in LDC's? If there isn't any, why not?

b) If collaboration is proposed with a developed country institution, what special reasons can be adduced in justification?

8. Dissemination

a) Who is expected to use the results of this research?

b) What steps, beyond "publication", will be taken to ensure that the results of the research reach the user in a suitable form?

c) Has the potential user specifically supported the project (apart from just saying OK)?

9. Budget

a) Is there an itemized budget, by fiscal year, for each phase of the proposed research?* The panel should not attempt to resolve budgetary issues but rather to alert the Secretary to the Research Committee who can then follow them up.

10. Rejected Proposals on Subjects of Interest

If the panel regards the subject of special interest but the research proposal in its present form inadequate, it should make a recommendation to the Research Committee that steps be taken to improve the proposal and, to the extent possible, describe these steps.

---

* The information should be consistent with Part IV of the research proposal form and should explain the bases of the budget estimates, e.g. the rate per man-month of consultants' time; the fares and per diem costs of travel. Data processing estimates should have been discussed with the Computing Activities Department. The amount of Bank staff time should be specified.

Research Grant

March 1, 1976

Professor Paul B. Downing
Department of Economics
Virginia Polytechnic Institute
and State University
Blacksburg, Virginia 24061

Dear Paul:

A formal agreement with the University of British Columbia Press is good news indeed. It should make publication within 1976 a real possibility.

I have discussed the terms of the arrangements with my colleagues in the Information and Public Affairs Department of the Bank, who suggest two ways in which the contract as drafted might ultimately pose difficulties for the Bank. For one thing, there is a strong possibility that I may want to use portions of Chapter 15 in a longer monograph on urban land markets and policy in developing countries that William Doebele and I hope to complete in the near future. I would therefore much appreciate your asking Mason if my contract could allow republication rights (paragraph 1) in co-authored books as well as ones that I exclusively author or edit. Second, the Bank feels that it should reserve publication rights of my contribution in languages other than English. We have arrangements of long standing with a Spanish-language press in Mexico City and one in Paris that publishes and distributes books in French, chiefly to North and sub-Saharan Africa. At some time in the future either could conceivably wish to have my Chapter translated. This would not apply if, for example, someone wanted to translate the entire volume, my Chapter included; in that case the Bank would undoubtedly not object. Perhaps a phrase like "republication rights in languages other than English are reserved for the World Bank" could apply on the understanding that these rights would be waived in cases where a third party wished to translate the entire volume.

I hope that these points raise no special problems for Mason. Please let me know if I can help further. And thank you (and Mason) for your long efforts on our behalf.

Sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

cc: Mr. J.J. Warford

OFGrimes:gm

Research General

Research Committee Members February 23, 1976

Benjamin B. King, VPD

Forthcoming Proposal: International Review Group on Population and Development

1. I attach, for your information, a proposal that the Bank share in the funding of an evaluation of research in population and development. An earlier draft of the proposal was reviewed in December by Mr. McNamara, who agreed with Hollis Chenery that the work should be undertaken but suggested that the research budget, rather than contingency funds, be considered as a source of financing.

2. The formal proposal will be reviewed in the normal manner and the recommendations of the review panel included with materials to be distributed to you before we next meet. Meanwhile, if you have any comments or reactions please given them, preferably in writing, to K. Zachariah or directly to Timothy King after his return in mid-March.

Attachment - additional copy unavailable

cc: Messrs. Grimes
Gulhati
Little
T. King
Zachariah

OFGrimes:gm

Research General

DPS, CPS Directors, Regional Chief Economists February 23, 1976

Benjamin B. King, VPD

Distribution of Report on Bank Research (see Dec. 31, 1975)

A copy of this year's report on Bank research, discussed at the Board meeting on January 27, has been distributed to a list of 513 economists at Headquarters and in the Resident Missions. This seemed the most appropriate way of disseminating information throughout the Bank about research performance over the past year and the status of current projects. If through a deficiency in the distribution list anyone did not receive a copy who should have, please let Orv Grimes or me know. We would also appreciate it if staff could forward any duplicate copies to Room F1233.

cc: Messrs. Chenery
Karaosmanoglu
Springuel
Grimes

OFGrimes:gm

Research General

Mr. Kenji Takeuchi, Acting Chief, EPDCE February 23, 1976

Orville F. Grimes, Jr., VPD

Oxford Seminar Research Project

As we discussed, I would appreciate receiving a note on the current status of this project by the end of next week. To give you an idea of the type of information we are seeking, a Status Report form with relevant sections indicated in red is attached.

cc: Mr. Tims

OFGrimes:gm OG

Attachment

Form No. 1167
(12-75)

# WORLD BANK RESEARCH PROGRAM

## STATUS REPORT

Date of Submission: _____

## I. PROJECT IDENTIFICATION AND APPROVAL OF REPORT

| | | |
|---|---|---|
| Title: | | Project No. RPO _____ |
| Department: | Division: | Staff Member Responsible: |
| Date Approved 1/ | Total Amount Authorized 2/ (to date) | Total Amount Disbursed 3/ (to date) |

Approval:

Division Chief (signature) _____ Department Director (signature) _____

## II. IMPLEMENTATION

| | | |
|---|---|---|
| Date of First Contract 4/ | Date of First Draft Expected: ★ | Date Final Report Expected: ★ |

Reports Completed

Reports Expected ~~(Current Fiscal Year)~~

★

NOTES:
1/ Month/Year first approved by Research Committee.
2/ Amount authorized, at the time of approval, plus all supplemental authorizations (if any).
3/ Total disbursement to date, including previous fiscal years. (Sum of disbursement column in Part III and total of disbursements in previous years).
4/ Date first contract was signed.

## III. FINANCIAL AND STAFF DATA

Research Number: RPO _____

Total Amount Authorized (by Research Committee) For the Current Fiscal Year _____

Total Disbursements in Previous Fiscal Year (s)* _____ Date: _____

| | Disbursements in Current Fiscal Year | | | | | Disbursements Next FY | |
|---|---|---|---|---|---|---|---|
| | Actual Disbursements To Date In Current Fiscal Year | Forecast Disbursements through June 30, . Based on: | | | | Total Expected | Portion Which Are Signed Contracts As of This Date |
| | | Balance of Signed Contracts Not Yet Disbursed | Firm Arrangements | Tentative Arrangements | Total (1)+(2)+(3) | | |
| | | (1) | (2) | (3) | | | |
| A. Contracts (by firm or consultant) | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Sub-Total A | | | | | | | |
| B. Travel** | | | | | | | |
| C. Data Processing ***Internal (IBRD) | | | | | | | |
| External (Timesharing, Remote Batch) | | | | | | | |
| Sub-Total (B+C) | | | | | | | |
| TOTAL (A+B+C) | **** | | | | **** | | |

NOTE:
(1) Do not overlap with previous column.
(2) Firm arrangements lacking only formal contract.
(3) Agreements not yet complete.
*/ Including disbursements for Consultants, travel and Data Processing.
**/ This item includes staff travel and travel by consultants when a Bank travel form (#6) is used. The total forecast disbursements for the fiscal year can be listed in the total column if information is lacking to provide the breakdown requested in columns (1), (2) and (3).
***/ The total forecast disbursements for the fiscal year can be listed in the total column if information is lacking to provide the breakdown requested in columns (1), (2) and (3).
****/ The total of these two figures should not exceed the total amount authorized for the current fiscal year.

| Staff Time (staffmonths) | Current FY | Next FY |
|---|---|---|
| Professional | | |
| Special Services | | |
| Total | | |

## IV. STATUS OF PROJECT

Please explain, using an additional page if necessary:

(1) Progress of study, including any changes in time schedule.

(2) The nature of the firm and tentative budgetary arrangements made and reported in columns (2) and (3) of Part III of the Form. If contracts are being negotiated, indicate parties involved.

(3) List all publications (journal articles, symposium papers, etc.) based on the research project. Update as and when necessary.

(4) If any financing has been received from Bank and non-Bank sources other than the External Research Budget, mention amounts, dates (quarters/FY) and sources. Do not include these amounts in Part III.

Research Gen.

Mr. K. C. Zachariah, Acting Chief, ECDPH

February 20, 1976

Orville F. Grimes, Jr., VPD

Population Review Group Proposal

1. We discussed how best to prepare this proposal for submission to the Research Committee next month. I think we need to:

(a) preface the proposal, suitably tightened and edited, with a short lead-in that describes the origin of Bank interest and the reasons why the work proposed will be useful to the Bank. Can specifics be given on how country economic work and sector studies (paragraph 5, Timothy King's memorandum of February 9) will be improved by this review?

(b) request a fixed sum, based on what we want to contribute rather than what is left over from other donors. A list of confirmed and prospective donors with the amounts committed would help put our contribution in perspective.

(c) know who the other members of the group will be, or at least the candidates identified so far. When is the composition of the group expected to be known? Furthermore, is a commitment from group members (other than the Chairperson) of less than 15% of their time enough to carry out a work program of this scope?

(d) reinstate, if your Department desires it, the procedure whereby DRC reviews all ECD proposals (and vice versa). You might wish to take this up with Mr. Gulhati.

2. We should have a panel review of the proposal in mid-March, by the present schedule. Please let me know if this timing presents a problem for Tim King.

cc: Messrs. B. B. King o/r
T. King o/r

OFGrimes:gm OG

Research General

# OFFICE MEMORANDUM

TO: Mr. Mervyn L. Weiner

DATE: February 18, 1976

FROM: Herman G. van der Tak

SUBJECT: Evaluation Content of CPS Work

Please find attached memo and list summarizing the evaluation content of CPS policy and research work, which has been prepared in response to your note of December 18 on the subject. Please note that the list refers only to specific tasks within the CPS work program and does not cover the substantial evaluation content of the regular functional control activities (project cycle, economic and financial work, procurement).

Attachment

cc: CPS Directors
Mr. C. R. Willoughby

# OFFICE MEMORANDUM

TO: Mr. Herman G. van der Tak

DATE: February 13, 1976

FROM: Arturo Israel AI

SUBJECT: Evaluation Content of CPS Policy and Research Work

I attach a table summarizing the Policy and Research work in CPS which contains some element of evaluation of Bank activities. A few studies or tasks are purely evaluation but the great majority have other principal objectives. No general patterns emerge from this review, but it is clear that the present work program contains a considerable amount of evaluation.

The following points should be taken into account in interpreting the attached information:

1. The summary has been compiled from the December 31, 1975 quarterly reports on policy and research work prepared by each CPS Department. The information was subsequently checked by the Departments. Given the nature of these quarterly reports, the information refers to studies or tasks that have been completed in recent months, current work, and assignments planned for approximately the next 18 months.

2. Besides checking the content of the table, no additional work was asked from the Departments -- in line with the informal nature of the request. Thus, when a date or a cost estimate appears as not available, it only means that it was not readily available. All of these missing data could be put together at a later stage, if necessary.

3. It is important to keep in mind that the attached table summarizes the evaluation content of the work program, but this content is not based on a systematic program of evaluation. Mr. Rovani was particularly emphatic about the need for such a program in the public utilities field.

4. The cost figures quoted are estimated totals for each study or task; they are not an estimate of the cost of the evaluation component.

Attachment

cc: CPS Directors

AI:ch

| TASK/PROJECT | COMPLETION Current Plan/ Actual | COST | REMARKS |
|---|---|---|---|
| PAS/VPSVP | | | |
| 1. Economic Analysis of Projects | | | |
| Implementation | Cont. | n.a. | Steering Group report on experience with 9 country case studies has been circulated. Project case studies in these countries now getting underway. Extension of country studies being considered. |
| 2. Review Experience with Project Implementation Units | | | |
| Education | Oct. 1975 | n.a. | Review of experience completed November 1974; implementation guidelines now in final draft. |
| Agriculture | Nov. 1975 | n.a. | Analysis of experience been reviewed in Regions; final draft being prepared. |
| 3. Cost Experience with Consulting Firms | Cont. | n.a. | Annual report, by nationality (February). |
| 4. Spot Audits of Consultants' Contracts | Cont. | n.a. | Program to be prepared in consultation with Regions, Controller's and Auditors by December 1975. |
| 5. Follow-up on Consultants' Audits - Supplementary Guidelines on consultants' contracts | ? | n.a. | To correct weaknesses in present procedures and practices; topics to be considered, see previous item. |
| 6. Environmental Audits | | | |
| Jengka Triangle Project | Oct. 1975 ) | $63,000 | Preparation mission Nov. 10-17, 1974; mission March 1975. |
| Others? | ) | | Three or four ex-post evaluations of environmental impact of Bank-financed projects, if warranted. |
| 7. State of Engineering and Physical Contingencies | ? | n.a. | Review of Bank practice of progress of engineering and accuracy of cost estimates at time of Board presentation; draft prepared (Armstrong, August 1975); to be rescheduled. |
| 8. Meteorology | | | |
| Use of Weather/Climate Information in Bank Projects -- jointly with World Meteorological Organization | Feb. 1976 | $2,000 | Review of practices and possible recommendations. Report circulated for comment. |
| 9. Participation of Local Professionals and Technicians in Bank Projects | Nov. 1975 | $4,000 | Includes evaluation of aspects of Las Truchas steel project |
| n.a. = not available | | | |

| TASK/PROJECT | COMPLETION Current Plan/ Actual | COST | REMARKS |
|---|---|---|---|
| PUBLIC UTILITIES | | | |
| 1. Research: Power | | | |
| Standards of Urban Electricity Distribution (67067) | June 1976 | $17,000 | Consultants have completed the first case study in Mexico. Tentative plans are for a second case study(ies) to be made in either (or both) Peru and Brazil beginning in March. |
| 2. Research: Telecommunications | | | |
| Rural Telecoms. Study: Costa Rica (67076) | March 1976 | $35,000 | Additional cost related analysis will be made during a visit to Costa Rica. Following that mission the last round of comments will be incorporated into final report. |
| Research by Telecoms. Borrowers: Papua New Guinea | Feb. 1977 | $14,000 | Study of the nature of telecommunications benefits and of pricing policy financed out of proceeds of the loan with an additional $5,000 grant from PBP. Empirical work has just started. |
| 3. Guidelines: Water Supply | | | |
| Action Program | n.s. | $75,000 | Preliminary evaluation of one of the approaches proposed by panel for monitoring health impact of water supply is under study in Uttar Pradesh, India. |
| 4. Data & Monitoring Systems | | | |
| Review of Water & Wastes Sector Lending and Work Program (DMS 603) | n.s. | 12-15 manmonths | The first phase of this project (preparation for discussions with WHO on long-range work plan for Cooperative Program) was completed on schedule in November. Phase II (defining urban poor content and expanded 76-80 lending targets) is in process as input into Regional plans. |
| Impact of Urban Emphasis on Water Supply Projects | May 1976 | $8,000 | Offshoot of Urban Task Force efforts. Study to be undertaken by consultant with input from Bank staff and Bank reports. |
| 5. IBRD/WHO Cooperative Program Review | Continuing | 3 manmonths (over 2-year period) | Review in Washington of objectives, work plans and current issues. |

| TASK/PROJECT | COMPLETION Current Plan/ Actual | COST | REMARKS |
|---|---|---|---|
| TRANSPORTATION & URBAN PROJECTS | | | |
| 1. Feeder Road-Yemen Arab Republic, Phase I Main Report, Summary | March 1976 | n.a. | Mr. Vickery (consultant) has provided revised methodology for assessing economic benefits. Arrangements have been made for YP (Mr. Barham) to assist in preparating summary of the main report on the Taiz-Turba road influenced region for publication of staff working paper. |
| 2. Feeder Road-Ethiopia | March 1976 | n.a. | Primary data being recorded on tape and forwarded to Washington. Report on physical and demographic characteristics of the study area have been completed and should be forwarded to us shortly. |
| 3. Feeder Road-Malagasy | Aug. 1976 | n.a. | 1. A progress report received from Mr. Rakotonirina and the Swiss field team indicates that all interviews have been completed and that coding is progressing satisfactorily. The Swiss team members are expected to leave Andapa after they complete their various assigned special survey task - most by 12/15/75.<br>2. Sale of miscellaneous furniture and vehicle items is proceeding as planned.<br>3. The "letter of understanding" has been forwarded to the Malagasy Government with some slight modification as suggested by the Legal Department.<br>4. No new Senior Consultant has been found yet. |
| 4. Monitoring of all Transportation projects | continuous (to be introduced by June 1976) | n.a. | |
| 5. Urban Evaluation S+S: Senegal Phase I | Sept. 1976 (first of five annual reports) | | First draft of the Research Design has been prepared by the researcher. These reports, for all three projects, were discussed at the Technical Conference held in the Bank Jan. 12-17, and are currently being revised for first year's operation. |
| 6. Urban Evaluation S+S: El Salvador Phase I | Dec. 1976 (first of five annual reports) | $1 million | First draft of the Research Design has been prepared by the researcher. These reports, for all these projects, were discussed at the Technical Conference held in the Bank Jan. 12-17, and are currently being revised for first year's operation. |
| 7. Urban Evaluation S+S Zambia Phase I | Dec. 1976 (first of five annual reports) | | First draft of the Research Design has been prepared by the researcher. These reports, for all three projects, were discussed at the Technical Conference held in the Bank Jan. 12-17, and are currently being revised for first year's operation. |
| 8. Singapore Traffic Restraint | July 1976 ? | n.a. | |
| 9. Monitoring of all S+S projects | continuous | n.a. | |
| 10. Monitoring of Urban Poverty Program and Urban I impacts of Bank Projects | continuous | n.a. | |
| 11. Socio-economic Impact Study - Kenya (in connection with Revised Access Road Program) | June/July 1976 | n.a. | |
| 12. Socio-Economic Impact Study - Brazil (in connection with proposed loan for secondary and feeder roads projects) | Oct. 1976 | n.a. | |

CENTRAL PROJECTS STAFF

Evaluation Work Underway/Planned



| TASK/PROJECT | COMPLETION Current Plan/ Actual | COST | REMARKS |
|---|---|---|---|
| AGR. & RURAL DEV. | | | |
| 1. Issues Papers | | | |
| Farm Technology | n.a. | $7,000 | The first draft of this paper has been withdrawn and the subject modified to cover farm technology rather than "mechanization" as originally proposed. As a result there is further delay in order to do the necessary research. |
| Land Settlement | Jan. 1976 | 6 manmonths | Revised draft is being distributed for staff level review. Against our wishes it has been elevated to a Policy Paper and we would like this decision reversed as the views do not warrant it being made into a Policy Paper. |
| Policy Paper | | | |
| Forestry | end March 1976 | 3 manmonths | |
| 2. Global Parameters of Small Farm Sector | March 1976* | $100,000 | *Of Part I of Project. Delay due to non-delivery of data from countries. |
| 3. Agricultural Mechanization in India | Dec. 1975 | $160,000 | Indian Research Institutes have now completed their assignments and submitted reports which we now have to interpret. |
| 4. Muda Farm Budget Income | Dec. 1975 | n.a. | DRC is conducting this research |
| 5. Cost of Distribution of Credit | Sept. 1976 | $20,000+ 6 manmonths | |
| 6. Review and critique of Agricultural Sector Models | June 1976 | 6 manmonths | |
| 7. Agricultural Prices and Subsidies Sector Paper (Turkey and Egypt) | Sept. 1976 | $15,000 + 12 manmonths | |
| POPULATION PROJECTS | | | |
| 1. Completed | | | |
| Inter-agency Coordination Problems in the Population Sector | Oct. 1975 | $20,000 + 4-1/2 manmonths | Final title: Issues in Population Assistance with Particular Reference to Bank Projects. |
| 2. External Advisory Panel reviewing Bank's Population sector | FY79 | $90,000 (est. for 1st year) | Panel will serve for three years. First meeting held Washington December 16-18. To be followed by field visits to selected countries and discussions with donors, borrowers, and with Bank staff before submission of draft report early next summer. Subsequently, the Panel will meet once a year. Total manpower estimated at one manyear for first year. Subsequent years will be less in cost and manpower inputs; estimates to be made later in the year. |

n.a. = not available

| TASK/PROJECT | COMPLETION Current Plan/ Actual | COST | REMARKS |
|---|---|---|---|
| EDUCATION | | | |
| 1. Policy Papers and OMs | | | |
| Review of Bank/UNESCO Cooperative Program | May 1976 | n.a. | Review underway. |
| Position Paper on Higher Education | | * | |
| 2. Guidelines and Standards | | | |
| Schedule of Accommodation & Space Standards for Educational Institutions | | n.a. | Collection of data underway. |
| Guidelines for Basic and Primary Education Project Items (a) Rural and (b) Urban | | * | |
| Tracer Study Guidelines | | * | |
| Guidelines for Project Related Training | | * | |
| 3. Analytical Tools | | | |
| Guidelines and Notes on Selected Subjects | June 1976 | n.a. | Consultants are preparing papers on:<br>a) Language Planning - Six case studies completed by consultants and discussed in the Department/Regions. A report assessing the need for similar studies for other countries circulated to the Regions for consideration.<br>b) Radio for education and development satellite and other distribution alternatives for radio - consultants study reviewed in the Bank mid-October 1975 and is being finalized.<br>c) Women's Education - A case study has been prepared by consultant (Belloncle) and has been circulated.<br>d) Education for Cooperatives - Consultant (Belloncle) report awaited. |
| 4. Study of Project Costing | April 1975 | n.a. | A set of forms for worksheets and related project costing tables has been distributed. Costing methodology will be continuously updated. |
| 5. Application of Staff Working Paper 169 (Comparison of Cost Effectiveness of Alternative Learning Technologies in Vocational Training) | FY 1976 | n.a. | The author of this study to follow this up by second field mission in February. |
| 6. Basic Education in the Least Developed Countries: West Africa and Sudan | FY 1977 | n.a. | An understanding has been reached with Mr. D. Carelli, Director of the UNESCO Institute in Hamburg, for the participation of the Institute staff (and of Mr. Botti from the UNESCO Cooperative Program) in the first phase of the study. The terms of reference and the work program of the study have been prepared. They will be submitted to the Governing Board of the Institute in its next session (last week of February 1976) for appraisal. According to the proposed work program the Institute is expected to develop a framework for the analysis of basic education programs and design operational guidelines for planning and implementation of such programs. |
| 7. Project Evaluation Technique and Procedures (Phase II, completed; Phase III, underway)<br>Total cost of all three [illegible] at $150,000.<br>[illegible] not available | | n.a. | IIEP has submitted a report on three evaluation exercises in primary, secondary and teacher education together with cost estimates and a schedule for the completion of this project. |

Research gen.

February 18, 1976

Ms. Marcy Avrin
Stanford Research Institute
Menlo Park, California 94025

Dear Ms. Avrin:

Thank you for sending a copy of your dissertation and the NBER paper. To give you an idea of the World Bank's research interests and priorities, I am enclosing a booklet describing current projects in what is called the External Research Program -- research funded within the Bank but involving external resources, often consultants from developing country research institutions, in addition to Bank staff. Were it not for a year-long investigation of urban housing, completed only recently, my own project which you will find listed on page 52 would probably be finished by now. As it is, William Doebele and I hope to have a first draft of the final product (a monograph on the operation of urban land markets in developing countries, with case studies of Land Readjustment schemes in Korea and valorization charges in Bogota) by late summer. One project that is not listed, because it was approved only last week, should prove interesting to you. It will involve modification of the Urban Institute's housing market model to fit developing country conditions. Ray Struyk and others at the Urban Institute will be collaborating on this project. Bertrand Renaud of the Bank's Urban and REgional Economics Division could furnish more details if you wish.

I am also enclosing a study of the economics of betterment that set the stage for my present research on urban land. Let me know if you have any comments or reactions.

Many thanks again for letting us know of your work.

Yours sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Encls.

OFG:gm OG

Form No. 27
(3-70)

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

Research gen

# OUTGOING WIRE

TO: MR. JOHANNES LINN

HOTEL INTERCONTINENTAL
CALI

DATE: FEBRUARY 17, 1976

CLASS OF SERVICE: LT / ITT

X 4472

COUNTRY: COLOMBIA

TEXT:
Cable No.:

AT INSTITUTO COLOMBIANO DE BIENESTAR FAMILIAR IN CALI COMMA

PLEASE SEE ROBERTO RUEDA WILLIAMSON COMMA DIRECTOR COMMA ON INFORMAL

SECTOR RESEARCH PROJECT THANK YOU ANNA SANT'ANNA

**NOT TO BE TRANSMITTED**

AUTHORIZED BY:

NAME DOUGLAS H. KEARE, CHIEF ECDRB

DEPT. DEVELOPMENT ECONOMICS,

SIGNATURE Douglas H. Keare
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

REF: RESEARCH PREPARATION
INFORMAL SECTOR EMPLOYMENT
CALI-COLOMBIA

Jae

For Use By Communications Section

Checked for Dispatch: _____

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE CORPORATION

# OUTGOING WIRE

TO: MR. JOHANNES LINN

HOTEL INTERCONTINENTAL
CALI

DATE FEBRUARY 17, 1976

CLASS OF SERVICE LT

X LH72

COUNTRY: COLOMBIA

TEXT:
Cable No.:

AT INSTITUTO COLOMBIANO DE BIENESTAR FAMILIAR IN CALI COMMA

PLEASE SEE ROBERTO RUBEN WILLIAMSON COMMA DIRECTOR COMMA ON INFORMAL

SECTOR RESEARCH PROJECT THANK YOU ANNA SANT'ANNA

DISPATCHED

FEB 17 10 03 PM 1976

COMMUNICATIONS

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME DOUGLAS H. KRAMER, CHIEF SECTOR

DEPT. DEVELOPMENT ECONOMICS,

SIGNATURE

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

REF: RESEARCH PREPARATION
INFORMAL SECTOR EMPLOYMENT
CALI-COLOMBIA

For Use By Communications Section

Checked for Dispatch

# Record Removal Notice

The World Bank Group Archives & Records Management

| File Title | | Barcode No. |
|---|---|---|
| Research Projects - General 1975 / 1977 Correspondence - Volume 3 | | 1064732 |
| **Document Date** | **Document Type** | |
| 17 February, 1976 | Board Record | |

**Correspondents / Participants**

**Subject / Title**
SD76-9
Summary of Discussion at Meeting of the Executive Directors of the Bank and IDA, January 27, 1976

**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 |

Research
Gen

See below

February 13, 1976

Orville F. Grimes, Jr., VPD

Anticipated FY76 and FY77 Expenditures
on Research Projects

1. To help estimate the claims on the research budget over the course of FY77, we would appreciate your assistance in supplying information on the financial requirements of each research project in your Department. I attach, for each project, a sheet on which the current estimated expenditure for FY76 and FY77 and subsequent years (if any) have been filled in. Note that the present FY76 figure is the FY76 budget authorization for the project, and that the total is the project's total authorization, i.e., the amount it is allocated in FY76 and subsequent years. The new FY76 figure supplied by the project supervisors, based on disbursements to date and anticipated expenditure (including accruals) through the end of the fiscal year, will likely, in most cases, be more up to date than that supplied in the January Status Report. Supervisors should include all expenditure components -- consultants, travel, data processing, temporaries, overtime -- in their calculations.

2. For projects in which the estimated FY76 and FY77 expenditure together exceeds the current authorization, a formal submission to the Research Committee may be required. You will be notified in early April about procedures to be followed in these cases.

3. This information should reach me by Wednesday, March 31. Thank you.

Attachment

OFGrimes:gm
Distribution:

M. Gary, cc: Tims, Duloy
P. Peter, cc: Rovani
R. Gomez, cc: Ballantine
J. Lowther, cc: Gulhati, Avramovic
M. Rathnam, cc: Jaycox, Ray
D. Greene, cc: Dabbagh, B. de Vries, Avramovic
G. Donaldson, cc: Yudelman, Ray
A. Egbert, cc: Yudelman, Ray
F. Hotes, cc: Yudelman, Ray

Project 67 -

Supervisor

Expenditure Estimates
($'000)

| | | Present Estimate | New Estimate |
|---|---|---|---|
| 1. | FY76/1 | | |
| 2. | FY77 | ____ | ____ |
| 3. | Subtotal FY76/77 | | |
| 4. | FY78 and later | ____ | ____ |
| 5. | Total/1 | | |

/1 Present estimate for FY76 is FY76 authorization.
Present estimate for Total is total authorization.

Note: The important figure is the subtotal on line 3. Distribution between FY76 and FY77 is less important.

Research fund

Mr. M. Ahluwalia, DRCID

February 13, 1976

Benjamin B. King, VPD Signed B. B. King

Optimality of Tax/Subsidy Intervention

1. The object seems worthy, but I would ask the question whom this is for - ultimately. I would presume that ultimately the results (if serviceable) would be used directly by the more sophisticated governments and in a Bank/country dialogue with the less sophisticated. In that case the need for presentation of a possibly over-simplified argument why "policy A is inferior to policy B, because ....." should be considered. I don't say that this need be done in the first instance, but its ultimate necessity should be borne in mind.

2. This raises a question of substance. If, for example, a government proposes to introduce (or has introduced) policy A, this in a sense is part of the evidence for what its objective function is; revealed preference, etc.1/. This does not mean that they would not prefer policy B, if they understood all the implications. It does suggest that the emphasis should be on the nature of the differential effects as between A and B rather than on some calculation of the "value" of A as against B based on a not too securely based notion of some body's utility function. Maybe, this is a more modest objective, but, maybe also, more useful.

3. Finally, policies can change. There may also be a case for A now, B later.

---

1/ Tax schedules are used to guess "n".

BBKing:gm

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

Yellow Research

# OFFICE MEMORANDUM

TO: Those listed below

DATE: February 13, 1976

FROM: Orville F. Grimes, Jr., VPD

SUBJECT: Schedule of Research Committee Meetings

1. Many of us remember that the research proposal submission and panel review process tended to become rushed toward the end of each fiscal year. The sentiment that because of budgetary stringencies proposals at the end of the queue might get slightly more summary treatment than those at the beginning led to a bunching of proposals in May and June, a time when Research Committee members were facing urgent administrative responsibilities in their own departments. We have been moving toward a lengthening of the review process for proposals, and intend to continue doing so during FY77.

2. Consequently, we are planning a regular schedule of Research Committee meetings at approximately 4-6 week intervals from late March through early September. We can think of no strong reason to expect any one meeting to be top-heavy with proposals, and in fact would encourage authors to resubmit at a later meeting if this appeared to be the case.

3. We have scheduled the March meeting for the week of March 22-26. Proposals in final form, with all necessary signatures, should therefore reach me by Thursday, March 4. We will of course let you know if this particular meeting date changes. The schedule for ensuing meetings is necessarily much less clear, but at present can be set out as follows:

Indicative Schedule, Forthcoming Research Committee Meetings

| Meeting Date (range) | Submission of Proposal |
|---|---|
| week of March 22-26 | March 4 |
| week of April 12-16 | March 25 |
| week of May 24-28 | May 6 |
| week of July 26-30 | July 8 |
| week of August 30-September 3 | August 13 |

It is important not to try to be overly specific about these dates now but to keep in mind (a) the approximate range of Research Committee meeting dates, and (b) the fact that proposals are due in final form about three weeks before the Committee meeting[1/]. I include a schedule of this kind with some trepidation since, for various reasons, they are nearly impossible to keep to. Nevertheless some indicative programming should help researchers plan their project submissions with a bit more predictability.

1/ We are, of course, no less desirous of seeing proposals in semi-final form somewhat earlier, about 5-6 weeks prior to the Committee meeting. This will allow the review panel to offer early advice to the researchers and permit a more extended treatment of the research design and objectives.

Distribution

Messrs. Chenery (o/r), Karaosmanoglu, B. B. King (o/r), Mrs. Cleave
Messrs. Avramovic, Balassa, Lerdau, Thalwitz, Vergin, Waelbroeck
DPS, CPS Directors and Division Chiefs
Regional Chief Economists
Ms. Gary
Mr. Lowther
Ms. Hazzah

Research
gm

Mr. M. Blobel, ASA

February 12, 1976

Benjamin B. King, VPD Signed B. B. King

Application of Research Program
to South Asia Region

1. I am, of course, in sympathy with the sentiment in the last paragraph of the Jansen-Pilvin memo of January 15, 1976. The only question is how. By stages, I think.

2. First, however, a few points:

(i) Projects carried out in your area are not necessarily those most readily applicable to your area. Project 670-16 on the agricultural sector in Mexico might, for example, be very applicable - in fact, an extension of it, with new wrinkles, to Pakistan is under consideration.

(ii) Application implies that there is something to apply - an identifiable tool or approach, which may or may not have to be modified. Projects vary a good deal in this respect.

(iii) Resources (human and financial) to carry out the application are extremely scarce. There are budgetary implications.

3. My first thought is that you assign particular slabs or sectors of the research program to different people in your department. We can give them a first-cut appreciation of their particular slab, eliminate non-starters, and steer them to the particular people in the DPS for the remainder.

4. Perhaps a brief meeting to elaborate, where necessary, on this and to discuss tactics would be helpful. I expect to be away next week (February 17-20), but any time after is OK.

BBKing:gm

Research gen

Regional Chief Econmists

February 12, 1976

Benjamin B. King, VPD

Research Institutions

1. Attached is a partial listing of research institutions in your Region. With some of these institutions -- denoted by an asterisk -- the Bank regularly exchanges research papers and publications. We send copies of all Bank Staff Working Papers, DRC Discussion Papers and the World Economic Indicators to these institutions, together with the World Bank Catalog listing all Bank reports issued to date and the Abstracts of Current Studies, which gives an overview of the current research program. In return, each participating institution sends us two copies of any published studies and such other research papers as it might select.

2. As you have no doubt observed, the current list of exchange institutions is not particularly representative of the overall research capacity in a given area, mainly because institutions usually become members at their initiative rather than ours. This, of course, leads to geographical imbalances of a sort, as several Executive Directors have observed during the last couple of Board presentations on research. We are trying to ensure that this program of documents exchange covers the field adequately; that no worthy groups have been left off and no institutions included that should not be, or no longer be.

3. I would appreciate your examining the attached list of institutions (members as well as non-members of the exchange program) and indicating to us:

(a) which of these are generally "of high caliber;"
(b) which member institutions should be dropped from the exchange list, and which non-members added; and
(c) a brief description, for the latter, of the institution's research interests, experience, and overall quality.

4. For many reasons the Bank wants to maintain contact with major research institutions in developing and developed countries, whether they eventually figure on a documents exchange list or not. I would therefore be grateful if, for each country in your Region, you would indicate on a separate sheet the most important source of research analysis and information -- a university department, research institute, the

government statistical office or whatever. Please include exact addresses where possible. We will undertake to keep this roster up to date and use it to explore ways of improving the dissemination of Bank research output.

5. Could I please have your suggestions by Friday, March 5. Thank you.

Attachment

cc: Messrs. Chenery, Karaosmanoglu, Merriam, Winterbottom, Grimes, Mrs. Bomstein

OFGrimes:gm

## RESEARCH INSTITUTIONS

### East Asia and Pacific Region

1. Bureau of Agricultural Economics, Canberra, Australia*
2. Research School of Pacific Studies, Australian National University, Canberra, Australia*
3. Indonesian Institute of Science, Jakarta, Indonesia
4. National Institute of Economic & Social Research, Jakarta, Indonesia
5. The Institute of Economic Research, Hitotsubashi University, Tokyo, Japan*
6. International Development Center of Japan, Tokyo, Japan
7. The Overseas Economic Cooperation Fund, Tokyo, Japan*
8. Korea Development Institute, Seoul, Korea*
9. Malaysian Centre for Development Studies, Kuala Lumpur, Malaysia
10. Development Academy of the Philippines, Rizal, Philippines*
11. Economic Faculty, Ateneo de Manila University, Manila, Philippines
12. University of the Philippines, Quezon City, Philippines*
13. Economic Research Centre, University of Singapore, Singapore
14. Economic Faculty, Chulalongkom University, Bangkok, Thailand
15. Economic Faculty, Thammasat University, Bangkok, Thailand

RESEARCH INSTITUTIONS

South Asia Region

1. Bangladesh Academy for Rural Development, Comilla, Bangladesh*
2. Bangladesh Institute of Development Studies, Dacca, Bangladesh*
3. Bureau of Economic Research, Dacca, Bangladesh*
4. Birla Institute of Scientific Research, New Delhi, India
5. Bombay University, Department of Economics, India*
6. Gokhale Institute of Politics & Economics, Poona, India*
7. Indian Institute of Foreign Trade, New Delhi, India
8. Indian Institute of Management, Ahmedabad, India
9. Institute of Economic Growth, University of Delhi, India*
10. National Council of Applied Economic Research, New Delhi, India*
11. Centre for Economic Development & Administration, Kathmandu, Nepal*
12. Pakistan Institute of Development Studies, Islamabad, Pakistan
13. Planning Commission, Government of Pakistan, Islamabad, Pakistan*
14. Ceylon Association for the Advancement of Science, Colombo, Sri Lanka
15. Marga Institute, Colombo, Sri Lanka
16. Sri Lanka Academy of Administrative Studies, Colombo, Sri Lanka*

## RESEARCH INSTITUTIONS

### Eastern Africa Region

1. Institute of Development Research, National University, Addis Ababa, Ethiopia*
2. Institute for Development Studies, University of Nairobi, Kenya*
3. Centre d'Etudes Economiques, University of Tananarive, Malagasy Republic
4. Economic Research Bureau, University of Dar-es-Salaam, Tanzania*
5. Makerere Institute of Social Research, Makerere University, Kampala, Uganda
6. Institut de Recherches Economiques et Sociales, National University, Kinshasa, Zaire
7. Institute for African Studies, University of Zambia, Lusaka, Zambia*

## RESEARCH INSTITUTIONS

### Western Africa Region

1. Centre d'Etudes et de Recherches Appliquees, Douala, Cameroon
2. Association of African Universities, Accra, Ghana*
3. Institute of Statistical Studies and Economic Research, Accra, Ghana
4. Institute of Statistical, Social & Economic Research, University of Ghana, Legon, Ghana*
5. Centre Ivorien de Recherches Economiques et Sociales, Universite d'Abidjan, Ivory Coast*
6. Institute for Agricultural Research, Zaria, Nigeria*
7. Economic Development Institute, University of Nigeria-Nsukka, Enugu, Nigeria
8. Institute of Administration, Ahmadu Bello University, Zaria, Nigeria
9. Nigerian Institute of Social & Economic Research, University of Ibadan, Nigeria*
10. African Institute for Economic Development & Planning, Dakar, Senegal
11. Societe Africaine d'Etudes et de Developpement, Ouagadougou, Upper Volta

RESEARCH INSTITUTIONS

Latin America and Caribbean Region

1. Instituto de Desarrollo Economico y Social, Buenos Aires, Argentina

2. Instituto de Estudios Politicos para America Latina, Buenos Aires, Argentina*

3. Library of Instituto Torcuato di Tella, Buenos Aires, Argentina*

4. Instituto de Investigaciones Socio-Economicas, Universidad Catolica Boliviana, La Paz, Bolivia

5. Centro Brasileiro de Analise e Planejamento, Sao Paulo, Brazil

6. Fundacao Getulio Vargas, Instituto Brasileiro de Economia, Rio de Janeiro, Brazil

7. Instituto Brasileiro de Economia, Department of Statistics & Econometrics, Rio de Janeiro, Brazil*

8. Instituto de Ciencias Humanas, Departamento de Economia, Universidade de Brasilia, Brasilia, Brazil

9. Catholic University of Chile, Centro de Estudios de Planificacion Nacional (CEPLAN), Santiago, Chile*

10. Centro de Estudios Sobre Desarrollo Economico, Universidad de los Andes, Bogota, Colombia

11. Fundacion para la Educacion Superior y el Desarrollo (FEDESARROLLO), Bogota, Colombia*

12. Instituto de Investigaciones Escuela de Ciencias Economicas y Sociales, University of Costa Rica, San Jose, Costa Rica*

13. Programa Centroamericano de Ciencias Sociales, Consejo Superior Universitario, San Jose, Costa Rica*

14. Institute of Social & Economic Research, University of the West Indies, Kingston, Jamaica

15. Centro de Estudios Economicos y Demograficos, El Colegio de Mexico, Mexico City, Mexico

16. Direccion de Estudios Economicos, Secretaria de la Presidencia, Mexico City, Mexico*

17. Instituto de Desarrollo de los Recursos Humanos del Estado de Mexico, Toluca, Mexico*

18. Instituto de Investigaciones Economicas, Universidad Nacional Autonoma de Mexico, Mexico City, Mexico

19. Centro Paraguayo de Desarrollo Economico y Social, Asuncion, Paraguay

20. Centro de Investigaciones Sociales, Economicas, Politicas y Antropologicas, Universidad Catolica del Peru, Lima, Peru

21. Centro de Investigaciones Economicas, Montevideo, Uruguay

22. Centro de Estudios del Desarrollo, Universidad Central, Caracas, Venezuela

RESEARCH INSTITUTIONS

EMENA Region

1. Institut des Techniques de Planification et d'Economie Appliquee, Algiers, Algeria

2. United Nations Industrial Development Organization, Vienna, Austria*

3. Vienna Institute for Development, Austria*

4. Institute for Development Research, Copenhagen, Denmark*

5. Centre of International Economic Relations, Institute of National Planning, Cairo, Egypt

6. Institute de Recherches en Economie de la Production, Paris, France*

7. OECD Development Centre, Paris France*

8. Friedrich-Ebert-Stiftung Forschungsinstitut, Bonn, Germany*

9. German Development Institute, Berlin, Germany*

10. IFO Institut für Wirtschaftsforschung, African Studies Centre, Munich, Germany*

11. Institute for Scientific Cooperation, Tubingen, Germany*

12. Institut fur Allgemeine Überseeforschung, Hamburg, Germany*

13. Research Institute for International Techno-Economic Cooperation, Aachen, Germany*

14. South Asia Institute, University of Heidelberg, Germany*

15. Institute for World Economics, Hungarian Academy of Sciences, Budapest, Hungary*

16. Economic Research Institute, University of Tehran, Iran*

17. FINAFRICA, Centro per l'assistenza finanziaria ai Paesi Africani, Milan, Italy*

18. Istituto di Studi per lo Sviluppo Economico, Naples, Italy*

19. Scuola di Sviluppo Economico, Rome, Italy*

20. Institut National de Statistique et d'Economie Appliquee, Rabat, Morocco

21. Faculty of Economics, Kuwait University, Kuwait, Republic of Kuwait

22. Institute of Social Studies, Resource Development Department, The Hague, Netherlands*

23. The Chr. Michelsen Institute, Bergen, Norway*

24. The Central School of Planning & Statistics, Research Institute for Developing Countries, Warsaw, Poland*

25. Institute for International Economic Studies, University of Stockholm, Sweden*

26. Centre National de Recherches Economiques et Sociales, Tunis, Tunisia

27. Belgrade Foreign Trade Research Institute, Belgrade, Yugoslavia

28. Center for Studies on Developing Countries, University of Ljubljana, Yugoslavia

29. Zagreb Institute for Developing Countries, Zagreb, Yugoslavia

Research Funeral

February 11, 1976

Mr. Ole Norgaard, Librarian
Institute for Development Research
104, Vester Voldgade
DK-1552 Copenhagen V, Denmark

Dear Mr. Norgaard:

Thank you for your letter of February 4 and your earlier bibliography of social science literature on Kenya. Following your initial request I discussed the proposal with the staff responsible for Bank operations in Kenya, and forwarded copies of your letter and the full proposal to them. You will hear from them directly if they have an interest in supporting the proposal. I had hoped initially to have their reaction before replying to you, but since this has not proved feasible I shall circumscribe my comments accordingly.

This research could indeed be valuable to scholars of Kenyan affairs as well as to those concerned with development processes more generally. However, projects of this kind are not usually financed from the extremely limited External Research budget of the Bank. Such funds are typically allotted to studies that address socio-economic problems of development by formulating and testing hypotheses using a variety of analytical techniques. Moreover, as you will note from the attached booklet, World Bank Research Program: Abstracts of Current Studies, the great majority of research projects financed by the Bank attempt to generate conclusions applicable across a wide range of experience by using analytical tools that illuminate issues of sector-wide importance. Consequently, we would encourage you to consider other means of funding this project, and wish you success in doing so.

Thank you for the opportunity of considering your worthwhile endeavor. Please feel free to contact me if I can be of further assistance.

Yours sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Attachment
cc: Ms. T. Sato, AEN

Research General

February 11, 1976

Mr. Francis E.K. Britton
Managing Director
ECOPLAN International
4, Rue de Chevreuse
75006 Paris
France

Dear Mr. Britton:

Thank you for sending us your aide-memoire of 23rd December together with the prospectus for your study on the future of the urban bus. Iaam afraid that we are not prepared to provide financial support as the study seems to be primarily related to conditions in Europe. It also seems to be the kind of work that should be supported by the bus industry.

Although in your letter to me dated November 26th you suggested that we have "traditional resistance" to your work, I assure you that we have no such bias.

It just so happens that the projects you have brought to our attention do not focus on the Bank's primary interests.

Sincerely yours,

G. J. Roth
Transportation and Urban
Projects Department

GRoth:sh

Research general

February 10, 1976

Mr. Francis E.K. Britton
ECOPLAN International
4, Rue de Chevreuse
75006 Paris,
France

Dear Mr. Britton:

Re: TRG Group Study of Para Transit

Thank you for your aide-memoire and for letting us have a sight of your "final draft proposal" for the para transit study. The subject matter is of interest to the Bank, but only insofar as it applies to developing countries. We also feel that developing countries, rather than Europe, offer the most significant experience of para transit: the Jeepheys of Manila; Por Puestos of Caracas; Dolmus of Istanbul; etc.

We are not willing to be a sponsor of the study, but are prepared to put at the disposal of your team any non-confidential material on the subject that may be readily available in our files. We would also be interested to receive copies of progress and other reports.

As a starter, I attach a copy of my own paper "the Regulation of Buses in Cities" which lists some para transit operations in developing countries.

Yours sincerely,

G. J. Roth
Transportation and Urban
Projects Department

Attachment:

GJR GRoth:sh

Research General

Mr. Clell G. Harral

February 6, 1976

G. J. Roth

Paratransit
Proposal and Work Outline from the Transport Research Group (TRG)

1. I attach a proposal dated, November 1975, which I have received from the "Transport Research Group" coupled with a request for Bank sponsorship of the research which would cost us FF35,000 (US$7,800). The proposal looks inflated, and I suspect that the report will be too. Furthermore, the current proposal concentrates on paratransit in Europe, and does not seem to involve much work in areas of interest to the Bank.

2. I would suggest that we decline to sponsor the project but offer to give the research team such material as might be readily available in the Bank, in exchange for a copy of the report when it is complete. Do you agree? Would you like to handle the matter or shall I proceed?

cc: Messrs. Holland, Watson

GJR GJRoth:sf

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

Research - Gen.

# OFFICE MEMORANDUM

TO: Mr. Martin Wolf

DATE: February 6, 1976

FROM: Barend A. de Vries BdV

SUBJECT: ECLA/IBRD Research Project on Export Promotion

I just received the attached letter from David Wall on his "contribution" to the India paper on the ECLA/IBRD export promotion project. We should shortly receive his manuscript and I would then appreciate having your views on how we may proceed. He may complete sections VI and VII of the outline (attached), but this would leave us with the introductory and concluding sections. I should like to discuss this with you on my return from mission on February 17.

att.

cc: Messrs. Avramovic
Greene
Dabbagh

Telephone : NEWICK (082 572) 3267

101 Allington Road
Newick, Lewes
Sussex, BN8 4NH, England.

Dear Barend:

I was about to write to you last Friday to bring you up-to-date with progress on the paper when I heard that my application for leave from the University for the Autumn Term had been turned down. I was so sure (on good grounds) that the application would be accepted that I did not bother to tell you that I would need to have, to attend the conference, once its date had been put back until October or November. I have enquired about the possibility of an appeal but have been told that as other people with stronger claims than mine have already been granted leave such an appeal would have little chance of success. As a result, I must very regretfully withdraw from the ECLA/IBRD conference on export policies.

This still leaves the question of the paper open. I was going to write and tell you that I had run into difficulties, both time and material wise, and would not be able to submit the draft by February 1st. Once I began work on it I quickly discovered that what I had did not in fact lend itself to the structure given in the country study outline sheet. Rather than check back with you I went ahead and a) revised chapter 5 of my 1974 MSS and b) wrote a rather long piece on section I of the outline, responding to some of the points in IV and V as well. Together the two pieces come to about 70 typed pages. The revision of chapter 5 does not at the moment make much out of marketing/promotion instruments, as I did not cover these in the TDA/IBRD/Sussex project, and could only write brief pieces which you might not have thought worthwhile. Overall then, the situation is that all of sections II and III and much of the material in IV and V need to be written plus the limited response I had intended to make to VIII and IX. I was going to suggest, in view of the timetable and my lack of relevant material, that we could have invited the collaboration of someone from the India Division, to write II to V and that I would concentrate on finishing the combined VI and VII, and the substitute for VIII and IX. In view of the fact that I would have had to have generated new material for these sections and that I am under heavy work pressure at the moment I could not have promised to complete before the end of May. The MSS of what is so far completed in rough draft is being typed now and should be in the mail to you by mid-week and you can make your own assessment.

With respect to the contractual position I can only think of the following positions: i) that you regard me as having failed to meet my obligations and that the contract is simply canselled (in which case I would keep the copyright on section I etc); ii) that you have someone else use my material and finish off the remaining sections, in which case I suppose I would get a pro rata payment: or iii) that I finish it as best I can to a later deadline. Let me know what you think best.

Once again, let me say how sorry I am that things have worked out this way. I have been looking forward for a long time to the conference and regret that I will not now be able to participate. My regret is heightened by the fact that this is the first time in my life that I have failed to meet a contract. My sincere apologies for the inevitable inconvenience that this will cause you.

Best regards,

yours sincerely,

David Wall

David Wall.

PRELIMINARY OUTLINE FOR THE COUNTRY STUDIES ON EXPORT PROMOTION POLICIES

1. The role of exports in the development process

The assumptions of the analysis will be made explicit and the role of exports in economic development will be discussed in the light of the various objectives of the development process. Particular attention will be given to the following issues: from an economic viewpoint, why export promotion? and from the country perspective, which is the role that exports are given within its overall development strategy?

II. Macroeconomic framework

This section will provide background information on the economic performance of the country concerned, an analysis of the structure and dynamics of its economy, and a discussion of its economic policies.

III. The structure and dynamics of exports

This section will contain an analysis of the structure and dynamics of exports disaggregated according to various criteria such as the nature of the goods exported, the nature of the exporting firm, the external market characteristics, etc.

IV. The external markets

This section will include an analysis of the conditions of access to the external markets, the competitiveness of the international markets for manufactured goods, discriminatory trading arrangements such as regional groups, bilateral trade agreements and other such mechanisms.

V. Foreign trade regime

In this section the characteristics of the external sector of the country concerned will be discussed, including an assessment of the openness of the economy, the structure of its balance of payments, the role of capital flows, etc.

VI. The export function

An attempt will be made to identify all the relevant variables that affect export performance. This will comprise a discussion of: (a) the production and technological determinants of exports, (b) the impact on exports of exchange rate and tariff policies, and (c) the various specific instruments used in export promotion such as direct subsidies, preferential credits, tax and tariff rebates, etc. The institutional aspects as well as the manner of application of each instrument will also be discussed.

VII. The effectiveness of the promotion system

This analysis will involve trying to assess the effect of the export promotion system and, if possible, of the various instruments separately on target variables such as the volume and stability of exports, their value added and so on. The quantitative importance of the various export promotion measures would be a necessary input in this analysis.

VIII. The efficiency of the system

This section will contain a cost benefit analysis of the export promotion system and its components. An attempt will be made to conduct the analysis using shadow prices. The different measures of cost will be discussed and evaluated.

IX. Conclusions

This final section comprises a summary evaluation of the export promotion system and the lessons that the country experience with export promotion provides for other nations.

Appendices

A. Basic definitions
B. Statistical tables
C. Research methodology
D. Further detailed notes on specific export promotion instruments.

Notes: The preceding outline constitutes a tentative formulation whose coverage is naturally subject to the information available in the countries concerned.

Research gen.

Research Committee Members

February 6, 1976

Orville F. Grimes, Jr.

Meeting on February 13, 1976

This volume contains material for the meeting of the Research Committee on Friday, October 13, 1976 at 3:00 p.m. in Room E1201. The agenda for this meeting is:

1) Resubmitted Proposal: Narangwal Population and Nutrition Project.
2) New Proposal: "Analyzing the Effects of Urban Housing Policies in LDCs".
3) Interim Evaluation of "Analytics of Change in Rural Communities" (No. 671-17) and request for additional funding.
4) Any other business.

The papers for the meeting are in the following sections:

i) Budget Tables - financial information concerning research proposals, the FY76 budgetary position, and ongoing research projects.
ii) Proposals - the research proposals and panel recommendations.
iii) Supplemental Request - request for additional funding under existing research projects.
iv) Completion Reports
v) Miscellaneous - Tables prepared for possible use at Board discussion of research program, distributed for information.

Distribution

Messrs. Chenery, Avramovic, Balassa, B. de Vries, Dubey, Jaycox, B. B. King, Lerdau, Thalwitz, van der Tak, Vergin, Waelbroeck, Yudelman

OFGrimes:gm

Research gm

Ms. T. Sato, AEN

February 4, 1976

Orville F. Grimes, Jr., VPD

Research Proposal: Bibliography on Kenya

1. As we discussed, I attach a copy of Mr. Norgaard's letter to me, my draft reply and the proposal to compile a bibliography of social science literature on Kenya. Our contact with Mr. Norgaard has been limited to an exchange of research documents; we have no clue as to his qualifications for carrying out the proposed research or, indeed, his motivation for sending us the proposal.

2. Please let me know whether the Region might have any interest in supporting this study. I'll reply to Mr. Norgaard after I receive your reaction.

Attachment

cc: (w/o att.)
Mr. Loh, AEN

OFGrimes:gm

DRAFT:OFGrimes:gm
February 4, 1976

Dear Mr. Norgaard:

Thank you for your letter describing the proposed bibliography of social science literature on Kenya. This research could indeed be valuable to scholars of Kenyan affairs as well as to those concerned with development processes more generally. However, projects of this kind are not usually financed from the extremely limited External Research budget of the Bank. Such funds are typically allotted to studies that address socio-economic problems of development by formulating and testing hypotheses using a variety of analytical techniques. Moreover, as you will note from the attached booklet, World Bank Research Program: Abstracts of Current Studies, the great majority of research projects financed by the Bank attempt to generate conclusions applicable across a wide range of experience by using analytical tools that illuminate issues of sector-wide importance. As a consequence, we would encourage you to consider other means of funding this project, and wish you success in doing so.

Following your request, I have discussed the proposal with the staff responsible for Bank operations in Kenya, and have forwarded copies of your letter and the full proposal to them. You will hear from them directly if they have an interest in supporting the proposal.

Thank you for the opportunity of considering your worthwhile endeavor. Please feel free to contact me if I can be of further assistance.

Yours sincerely,

OFGrimes

cc: Ms. T. Sato, AEN

Central files F244

re: Urban Operations & Review + Support Unit

Research Gen

George Beier

February 3, 1976

Nicolas Lethbridge NL

Visit to African Rural Employment Research Project - Michigan State University

1. Dennis Anderson and I visited Michigan State University on January 30 and had discussions with Carl Leidholm about the above project. Our discussions mainly centered on the work being done in Sierra Leone both because it is that part of the project in which Leidholm is principally involved and because it appears that the research in Ethopia and Nigeria is less relevant to our interests - certainly as far as small scale industry is concerned. Theoverall project is being funded by USAID, and the Ford and Rockefeller Foundations. It has cost about $800,000 and the initial findings will be reported in June 1976.

2. At present no further results are available from the Sierra Leone exercise other than those we have already seen. However all the data from Phase II[1] have been collected and are now being sorted and stored. Analysis will begin mid February. The data will be analyzed for three major aspects: migration, rural farm employment activities and non-farm - small scale industrial activity. The Sierra Leone data are unique amongst the three countries because data have been collected on non-farm activities through the entire rural, village, small town, large town (Freetown) spectrum; and because migration studies have been made for a sample of migrants over a one year period. The study will also include demand analysis based on household expenditure data and sources of supply (rural/urban, formal/informal). Both these aspects make the research highly relevant to our urban poverty work.

3. Leidholm explained some very preliminary findings, for example:

a. Enormous variations in capital labour ratios have been found between modern, intermediate and traditional production techniques (example quoted was baking: 66 : 1, 30 : 1, and 1 : 1) had been found and that these were associated with similar variations in rates of return per unit of output (35%, 20% and 6%).

b. Costs and methods of production varied significantly with city size.[2]

---

1/ See working paper no. 11.

2/ An example quoted was tailors. Rural village tailors required far greater initial capital since they needed to buy a sewing machine while tailors in towns could take advantage of rental markets for such machinery.

c. Family income as a whole and per unit of capital derived from non-farm activities in rural areas (i.e. on farms) was usually in excess of farm income.

d. He suspected that it would emerge that macro economic policy variables such as interest rate policy, tariff policy and farm price policy would be more significant explanatory variables than institutional factors such as excess to credit and extension work.

4. It is clear that the research is of great significance to attempts within the Bank to refine policy and targets with respect to both urban and rural poverty and that we should maintain a close interest in the development and further analysis of the data after June. In this connection we asked Leidholm to prepare a presentation of his results with respect to small scale industry for a seminar in the Bank during May and he agreed to do this. We also told him that we would be interested in using him as a consultant, probably in connection with both the rural employment policy paper and in the refinement of industrial and DFC targets and guidelines for urban related objectives during July and August. The conflict here is probably more apparent than real but we should co-ordinate closely with rural development to ensure a wide applicability.

5. As far as ORSU's interest is concerned I told Leidholm that our interests would probably be in two fields:

1. In developing an appropriate and simplified methodology for analysis of small scale urban industry and identifying target groups, major constraints and practical interventions; and

2. In research designed to gather and organize the data in a number of locations.

He expressed interest more in the first than in the second of these and thought that the Sierra Leone study did have generalisable features of methodology, approach and results which could quite quickly be described and operationalized.

6. The work on migration appears to be less advanced but we did not have the opportunity to discuss it at length. Derek Byerlee, who is mainly responsible for that aspect of the work, will be in Washington for the Bank conference on migration. I asked him to contact you then for further discussions.

NLethbridge:bb

cc: Jaycox, Dunkerley, Churchill, Anderson

Research General

Mr. Graham Donaldson

February 2, 1976

G. Temple GPT

Research Program in Education for Rural Development

1. The projects stem from the unstated assumption that increased productivity -- measured either as increased average or marginal products -- guarantees increased incomes for producers. Research issues would change were the distribution of increased production to be given more concern.

2. More specifically:

p 2 (ii) Assumes the deliver system constant and allows the social system to change. Since the social system is not a policy variable, research should examine differences in delivery systems between similar social environments. Then the results could be a recommendation for an optimal delivery system instead of a descriptive summary.

p 3 (ii) Again it appears that the emphasis is on differences in social systems and not differences in training policies within a given social environment.

p 4 The need for a taxonomy of benefits of non-formal education is not clear -- appears as though someone is trying to justify a dubious project. Research should focus on how to quantify benefits, not on how to list them.

p 6 The research goal would be more obvious if they simply said that they wished to estimate labor coefficients for agricultural projects. This proposal is useful because the resulting data might be used in project appraisal work. I should have thought, however, that more data would have been available than implied in the proposal.

Might it be useful if attempts were made to estimate labor input functions from a set of similar agricultural projects?

GPTemple:oh

Research gen.

January 30, 1976

Mr. Amir U. Khan
Head, Agricultural Engineering Department
The International Rice Research Institute
P.O. Box 933
Manila
Philippines

Dear Mr. Khan:

Thank you for your letter of January 6, 1976, and the drawings for the 3-wheel motorized cart.

We think its an ingenious design with tremendous potential in developing regions which do not have any powered-systems of transport. We are, therefore, keen to adopt it for African farming communities, besides construction projects.

We might, however, have to make some design changes to adapt the vehicle to African conditions. Because of the heavy seasonal rainfall, the steep grades and the poor condition of the roads, we may need a stronger than 7-horse power engine in a more rugged vehicle, with greater clearance between the road surface and the body.

All this can be determined only after prototype testing on site. And for that we would appreciate IRRI help and your guidance. We would like to persuade you, once again, to join us in this project. Perhaps your institute would be more willing to participate now that we intend to use the vehicle in rural communities first -- we plan to start with Tanzania -- before diversfying into other uses like construction projects.

Thank you also for telling us about Mr. Ted Owens of AID. We had a very stimulating meeting with him the other day and hope that AID and the Bank could work together on some worthwhile intermediate technology projects.

Mr. Owens showed a keen interest in the application of your motorized cart in African farming communities. He even indicated the possibility of AID support and involvement in this project, though he could not give any firm commitment until summer. He did, however, suggest that before we embark on this venture it would be a good first step to conduct a survey

of African rural conditions to determine how IRRI designs should be modified to suit this market. He too felt that you should conduct the survey along with other engineers from the Bank, the IDTG London, and the concerned African country.

So, as you can see, we all vote for you! I am hoping that Clell will be able to finally convince you and your institute to join us in this project. Meanwhile, please could you send me (a) cost estimates for this vehicle and (b) names of possible manufacturers in Philippines or other Asian countries who have experience in producing such vehicles. Who are the other groups you know, who could be asked to get involved with us in this program?

With best regards,

Yours sincerely,

Curt Carnemark
Policy Implementation Adviser
Transportation and Urban Projects Department

Mr. Ted Owens
Office of Rural Development (T.A.R.D.)
Room 200
515 22nd Street, N.W.
Washington, D. C. 20523

Cleared with & cc: Ms. Sato (EA)
cc: Mr. Harral (TRU)

SKChopra:hf

FORM NO. 75
(7-73)

WORLD BANK GROUP

| ROUTING SLIP | DATE August 9, 1976 |
|---|---|
| NAME | ROOM NO. |
| Mr. Orville F. Grimes, Jr. | F1233 |
| File: Annual Report 1977 | |
| | |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | ✓ | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

REMARKS

Bank Research Program - Annual Report:
February 15, 1977

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| C. F. OWEN | A1226 | 2450 |

Mr. Hollis B. Chenery, Vice President,
Development Policy

January 30, 1976

F. W. Demry, Secretary

Promises of Action: Bank Research

1. During Board discussion of the Annual Report on Bank Research, Mr. McNamara responded to Directors, as listed below, making the following promises of action:

(a) The impact of research on specific operational programs would be a major element of the next Annual Report on Bank Research. (Mr. Syrie)

(b) The consultant to formulate a comparative study of experiences of private and public enterprises would discuss the terms of reference with Dr. Sen. (Mr. Iglesias)

(c) The Research Committee would have informal seminars during the year with interested Executive Directors. (Mr. Cooper)

(d) The External Advisory Committee should look at the research program as a whole, as much as individual projects. (Mr. Cooper)

(e) The Administrative Budgets would include more comprehensive information on the Bank's analytic work and research (broken down into categories) and respective expenditures. (Mr. Cooper)

(f) A note would be prepared for the Executive Directors listing empirical studies which compare the relative merits of centrally planned economies and market economies in the development process. (Mr. Janssen)

2. Regarding 1(f), could you please advise when the note will likely be ready for distribution.

cc: Messrs. Karaosmanoglu
Benjamin King
John Adler ) In relation to 1(e)
Dowson )

CFO/ebg

# Record Removal Notice

The World Bank Group Archives & Records Management

| File Title | Barcode No. |
|---|---|
| Research Projects - General 1975 / 1977 Correspondence - Volume 3 | 1064732 |

| Document Date | Document Type |
|---|---|
| 27 January, 1976 | Board Record |

**Correspondents / Participants**

**Subject / Title**
IBRD/IDA Joint Director's Meeting - January 27, 1976 Excerpt from Transcript of the Meeting Annual Report on Bank Research

**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 |

Research gen

Form No. 27
(3-70)

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

# OUTGOING WIRE

TO: MRS. JASLEEM DHAMIJA
UNDP
P.O. BOX 1555
TEHRAN

DATE: JANUARY 29, 1976

CLASS OF SERVICE: ~~LT~~ tele (EXT 4556)

COUNTRY: IRAN

TEXT:
Cable No.: THANKS FOR ACCEPTANCE STOP WILL BE ABLE TO VISIT TEHRAN FOR ONE OR TWO DAYS END MARCH EARLY APRIL TO DISCUSS DETAILS AND AM SENDING RELATED BANK DOCUMENTS AS BACKGROUND STOP SCOPE OF CASE STUDY IN IRAN WILL BE FIRST TO PROVIDE TO EXTENT POSSIBLE QUANTITATIVE ASSESSMENT OF GROWTH OF NON FARM ACTIVITIES EMPLOYMENT AND EARNINGS IN VILLAGES AND TOWNS COMMA AND RELATION TO AGRICULTURAL DEVELOPMENT SECOND DESCRIPTION OF KINDS AND CHARACTERISTICS OF NON FARM ACTIVITIES EG LABOUR INTENSITY THIRD REVIEW INSTITUTIONAL CHANNELS FOR SUPPORT SUCH AS CREDIT MECHANISMS SMALL SCALE ENTERPRISE EXTENSION AND TRAINING STOP PENDING YOUR REPLY WILL SET UP CONTRACT FOR UPTO FOURTY MAN DAYS BEGINNING APRIL ONE THRU END JUNE TO BE EXTENDED AS NECESSARY STOP THINK BEST PLAN WILL BE FOR YOU TO COMMENCE WORK IN IRAN AS CONVENIENT FOLLOWING MY VISIT AND THEN COME TO WASHINGTON TO PREPARE REPORT FAITHFULLY

DENNIS ANDERSON
INTBAFRAD



**NOT TO BE TRANSMITTED**

AUTHORIZED BY:

NAME: Dennis Anderson

DEPT.: Development Economics

SIGNATURE: Dennis Anderson
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: DA:krt

**ORIGINAL (File Copy)**

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

For Use By Communications Section

Checked for Dispatch:

Form No. 27
(3-70)
INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE CORPORATION

# OUTGOING WIRE

TO: MRS. JASMINE DIAMILA
UNDP
P.O. BOX 1555
TEHRAN

DATE JANUARY 29, 1976

CLASS OF SERVICE RELEAS (EXT 4556)

COUNTRY: IRAN

TEXT:
Cable No.:

THANKS FOR ACCEPTANCE STOP WILL BE ABLE TO VISIT TEHRAN FOR ONE OR TWO DAYS END MARCH EARLY APRIL TO DISCUSS DETAILS AND AM SENDING RELATED BANK DOCUMENTS AS BACKGROUND STOP SCOPE OF CASH STUDY IN IRAN WILL BE FIRST TO PROVIDE TO EXTENT POSSIBLE QUANTITATIVE ASSESSMENT OF GROWTH OF NON FARM ACTIVITIES EMPLOYMENT AND EARNINGS IN VILLAGES AND TOWNS COMMA AND RELATION TO AGRICULTURAL DEVELOPMENT SECOND DESCRIPTION OF KINDS AND CHARACTERISTICS OF NON FARM ACTIVITIES EG LABOUR INTENSITY THIRD REVIEW INSTITUTIONAL CHANNELS FOR SUPPORT SUCH AS CREDIT MECHANISMS SMALL SCALE ENTERPRISE EXTENSION AND TRAINING STOP TENDING YOUR EARLY WILL SET UP CONTRACT FOR UPTO FOURTY MAN DAYS BEGINNING APRIL ONE THRU END JUNE TO BE EXTENDED AS NECESSARY STOP THINK BEST PLAN WILL BE FOR YOU TO COMMENCE WORK IN IRAN AS CONVENIENT FOLLOWING MY VISIT AND THEN COME TO WASHINGTON TO PREPARE EXPORT FAIRNULLY

DENNIS ANDERSON
INTERVRAD

DISPATCHED
JAN 29 9 59 PM 1976
COMMUNICATIONS SECTION

NOT TO BE TRANSMITTED

AUTHORIZED BY:
NAME: Dennis Anderson
DEPT: Development Economics
SIGNATURE: Dennis Anderson
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)
REFERENCE: DA:kre

CLEARANCES AND COPY DISTRIBUTION

For Use by Communications Section

ORIGINAL (File Copy)
(IMPORTANT: See Secretaries Guide for preparing form)

Research gen

Mr. Francis X. Colaço, Fiscal Economist, Off.V.P.EMENA January 29, 1976

Vittorio Masoni, International Relations

On-going Research on Mediterranean Development

Fritz Steuber of the European Office has brought to my attention a research on Mediterranean Development that is being carried out by IAI of Rome, with the assistance of the Ford Foundation. In view of your interest for research in this area I thought you might like to see the attached note on the scope of the study, prepared by IAI's Research Director. Perhaps you might like to talk with Mr. Steuber about this or, should the opportunity arise, get in touch with IAI itself.

cc: Mr. Steuber, European Office.

VMasoni:az

istituto affari internazionali
88, viale mazzini • 00195 roma
tel. 315892-354456 • cable: intaffari-roma

The IAI's Mediterranean Project

With the financial backing of the Ford Foundation and other sources in Italy, the IAI began a three year research project in 1974 on the political stability and economic development in the Mediterranean (*). This note will indicate the general orientation of the project.

The basic question with which the Mediterranean project deals is to establish the limits, the concrete possibilities, the obstacles and the significance of economic and political cooperation between European countries and the countries of North Africa and the Middle East. In other words it is concerned with a definition of the factors of aggregation and disaggregation, of integration and conflict operating in policy making in the area.

From the political point of view the study of this problem has led us to a three tier analysis:

a) the influence of the superpowers on the stability of the Mediterranean area and on the possibilities for cooperation;
b) the importance of the various moves towards integration and cooperation within the Mediterranean area (the integration of Europe, of the Maghreb, of the Arab world and the Euro-Arab dialogue, etc.);
c) the influence of alternative relations (the relations between Arabs and Africans, between Arabs and non-aligned states and between Europe and the states of eastern Europe).

Of course excellent research has already been done on many of these questions. We decided to limit our attention to certain problems. Within the Institute there is a researcher charged with the job of constantly following the relations between the Mediterranean area, the great powers and the EEC. In addition, the project is supplemented by the collaboration of external scholars in the study of specific states, areas or crises. We follow very closely the problems of inter-Arab cooperation. In this respect, two Arab scholars are examining within the framework of our project, the influence of petrol and the Palestinian question on inter-Arab politics.

From the economic point of view our attentions are concentrated on the examination of the kind of integration that could take place in the Mediterranean following the crisis initiated by the ending of the convertibility of the dollar and the rise in the price of crude oil.

---

(*) This geographical area has been defined in broad terms for the purposes of our project, and includes in addition to the littoral countries, areas contiguous to the Mediterranean basin: the EEC, the Balkans, the Arab Peninsula and Iran.

The analytical framework is similiar to the three tier plan outlined above in relation to the political aspects of the project: relations with the United States, the integration within the area that centres on the Mediterranean (in particular Arab integration), and, finally, alternative relations to those within the Mediterranean. Four areas are currently being researched: a) multinational investment in the Mediterranean; b) the movement of labour in relation to movement of capital in the Mediterranean; c) the relations between the EEC and southern European countries; d) the possibilities of bilateral cooperation between governments. In addition we hope to commission some Arab scholars to research two additional areas: a) the migratory movements within the Arab world; b) the industrial options open to the Arabs in relation to external political options.

This research activity is the subject of scrutiny at international conferences. Up until now there have been two: one in Milan, in Spring 1974 on Euro-Arab cooperation, and another in Spring '75 on crisis management in the Mediterranean.

The results of the 1974 conference were published in Italian, and parts were also translated into Arab and English.

The results of the second conference are about to be published in Italian. In Italian again, we have published a book which gives the principal information on the major economic and political issues in the Mediterranean; the translation of this book into English is planned.

Research Gen

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

# OFFICE MEMORANDUM

TO: FILES

DATE: January 19, 1976

FROM: Vincent W. Hogg VWH.

SUBJECT: Conference on Policy-Oriented Research, Rotterdam, Netherlands, April 1977

1. At the request of Mr. Król of the Netherlands Embassy, Mr. Jaycox and I met with Dr. Henk J. Noortman today. He was accompanied by Professor Marvin L. Manheim of M.I.T. These gentlemen are members of a steering committee which is preparing the program for this conference (list of other steering committee members attached.) The purpose of the conference would be to bring out some of the new developments in policy-oriented research; to explore to what extent transport research and policy analysis has been useful in decision taking; to improve the understanding of the trade-offs involved in transport technology and the methods of analysing the policy issues which arise in the process; and the methodologies for improving the forecasting of the assessment of the impacts of transportation investments.

2. The purpose of the conference is to bring together experts in the above and related fields so as to share views and experiences and to provide opportunities for those working in or on LDCs to hear about new developments and to participate in the conference by exposing their own transport policy problems and research efforts.

3. The steering committee will call for special papers from particular authors so that "in-depth" discussion of topics can take place. That is, the intention is to make the conference a select, high-level, affair and not the usual free-for-all. The Bank's visitors asked for Bank support by (a) helping to identify people, particularly from LDCs who could give papers; (b) determination of the substance of the final program, and (c) by meeting the cost of those coming from the LDCs.

4. Mr. Jaycox indicated that he could see value in the conference, particularly as a way of shortcircuiting the long delay in the publication of new ideas and techniques. He would prefer, however, to keep the Bank in a low profile, but would be willing to cooperate if the links between policy-oriented research and LDC needs and priorities were made clear. For example, he stressed that he would like to see an emphasis on the experiments and experiences in Singapore; the type of rural impact work which is being done on the Yemen, Malagasy and Kenya and the study output from the Bank's work in highway design, and labor capital studies. He also mentioned as a possibility the results and implications of the study being done by Professor Bennathan and Alan Walters on containerization and port pricing.

5. Since the steering committee is to consider the program on February 6 and the visitors are in Washington only this week, he suggested they meet with Messrs. Carnemark and Harral on Wednesday, January 21. Arrangements for such a meeting are being made. Meanwhile, Mr. Jaycox indicated that he would be

prepared to consider some financial help so that LDC research workers could be represented at the conference. However, he could clearly make no commitment until:

(a) he had some indication of how much was involved;

and

(b) he had the opportunity to discuss the request with, inter alia, Messrs. Carnemark and Harral.

cc: Messrs. Kamarck (information)
Jaycox
Carnemark
Harral

VWH:ya

Prof.Dr.I.B.F.Kormoss
Europe College
11 Dijver
Brugge
Belgium

Prof.Dr.David Genton
Director of the Institute
of Transport
Chemin des Délices 9
Lausanne
Switzerland

Prof.B.Bjørkman
Royal Institute of Technology
79 Valhallawägen - building 72
Stockholm 70
Sweden

Prof. Yoshinosuke Yasoshima
Dept.of Civil Engineering
University of Tokyo
7.3.1. Hongo
Bunkyo-Ku Tokyo 113
Japan

Mr.Raymond Cope
I.A.T.A.
P.O.Box 160
Geneva
Switzerland

Professor Marvin L.Manheim
Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge-Massachusetts 02139
U.S.A.
(address in Paris - France:
23 Rue de Lille
Paris-75006)

Mr.A.Silverleaf
Director of the Transport and Road
Research Laboratory
Dept. of the Environment
Old Wokingham Road
Crowthorne - Berks RG11 6AU
England

Mr.M.Frybourg
Director of the Institute for
Transport Research
2 Avenue du Général Mallerat-
Joinville
B.P. 28 - 94110 Arceuil
France

Mr.Arthur de Waele
C.E.M.T.
33 Rue de Franqueville
75775 Paris - Cedex 16
France

Drs.H.J.Noortman
Director of the Netherlands
Institute of Transport
35 Treubstraat
Rijswijk (ZH)
The Netherlands

Dr.Richard M.Soberman
Vice President Planning
Ontario Transportation Development
Corporation
20 Eglinton Avenue West
Toronto - Ontario
Canada

Prof.Dr.W.Leutzbach
Institut für Verkehrswesen
7500 Karlsruhe
Kaiserstrasse 12
Germany

Research

Mr. Parvez Hasan

January 19, 1976

D. C. Rao

Research Proposal on Flow of Funds

1. You had asked for my comments on a copy of a draft research proposal sent to you by Mr. Bhatt. The research proposal consists of: (a) preparing conventional flow of funds tables in countries where the information is readily available. They suggest Korea, the Philippines, Brazil and India; and (b) use of the tables to identify imbalances in financial flows between sectors. The proposed methodology is that used by Mr. Bhatt in his study on India which is described on page 73 of Annex II of the proposal.

2. I certainly agree with the claim that the flow of funds presentation has advantages in organizing financial data and highlighting problems in financial planning. The research project would also be useful in our economic reporting, by educating country economists in the interpretation of flow of funds tables and possibly encourage their wider use in our economic work. A flow of funds approach would also lead country economists to look at the whole financial system rather than at the monetary sector alone (which tends to be the problem with work done in the IMF). In principle, therefore, I think the research proposal deserves our support provided not too much resources are devoted to it (which might easily be the case if we attempt to produce detailed flow of funds tables in countries where the basic information is not readily available).

3. There is a problem, however. I personally believe that the work on flow of funds so far has been analytically barren, although there is constantly the promise of interesting analyses around the corner. Financial flows between sectors are subject to a variety of behavioral, technological/legal and institutional constraints (which are sometimes also policy parameters). These constraints tend not to be properly represented when financial projections are made on the basis of fixed coefficients implicit in a flow of funds matrix, thereby understating the sensitivity to changes in interest rates and other institutional changes. What is needed is a demonstration that flow of fund matrices are analytically useful. I think this should be attempted initially for only one or at most two countries. If the attempt is successful, the use of the flow of funds format could be extended more widely.

4. The proposal lacks an estimate of the resources that are necessary for the research and the time frame that is proposed.

5. The proposal is returned, herewith.

DCRao/jmc

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

Annual Report 1976

# OFFICE MEMORANDUM

Research - General

TO: P & B Files

DATE: January 28,1976

FROM: John Blaxall, Deputy Director

SUBJECT: Board Discussion, 1/27/76

1. During the Board Meeting on January 27, two items of interest for P & B came up.

2. The first item was a brief reference by Mr. Cooper, in connection with the forthcoming German Borrowing, to the difficulty of evaluating borrowing costs taking into account the currency in which an issue was denominated. How, in other words, should one compare 8.35% in DM with 8.0% in US$? Mr. McNamara observed that in the days of fixed exchange rates this had been a significant problem; but that it had been possible, if not to take a forthcoming exchange rate change into account, at least to have that possibility in mind when assessing the borrowing costs of a particular issue. He felt that with flexible exchange rates, and consequently more gradual adjustments of currency values, it would be much more difficult on the one hand, and much less necessary on the other, to factor the currency denomination as well as the interest rate into the equation. Mr. Cooper felt nevertheless that this was a subject which required further attention, and Mr. McNamara therefore said that either he or Mr. Cargill would take it up with Mr. Cooper to get a better idea of what he had in mind.

3. During the discussion on the Bank's Research Program a number of comments were made about the budgetary implications and the form of presentation of the Research Program--in particular the need to spell out more clearly what was and was not covered under the heading of "research", and what were the "total costs" involved.

4. Mr. Sigurdsson asked, among other things, why research on rural development projects had not grown faster. Mr. McNamara noted in reply that money was not a limiting factor in connection with research on rural development. Our difficulty was rather in formulating the problems which we ought to address, and designing appropriate research projects. He expected that our initial experience in dealing with rural development loans would soon lead to well-designed research projects which would be included in future research programs.

5. Mr. Sigurdsson also asked what proportion of the external research budget was spent on institutions and individuals in developing countries. Mr. Chenery's guess in response was "about one-quarter or one-third". We should establish the facts on this question.

6. In response to a comment from Mr. Ryrie, Mr. Chenery said that a major focus of the report to be produced in a year's time would be the ex post evaluation of research projects, concentrating on the ultimate usefulness in practical terms rather than simply on the fact that they had been completed and published.

7. Mr. Green wanted to know what was the relationship of the $2 million of external research to the total of $12 million which he recalled from the FY76 budget paper as being the total amount of Bank spending on research activity. I was asked by Mr. McNamara to confirm the numbers, which I did pointing out at the same time that the document before the Executive Directors covered a great deal more than the expenditure of $2 million on external research--Mr. Chenery guessed that the projects included in the research program covered about two-thirds of all of the work done by the Bank which bore the label of "research". Mr. McNamara took the opportunity to say that our cost accounting system was still very primitive and our categories rather fuzzy. He said that he thought that the Research Committee ought to "manage" more than two-thirds of our total research activities that was now covered--or alternatively that we should redefine the remaining one-third as something other than research if that would be more appropriate. He invited the members of the Board to let him know of any research management techniques or cost accounting methods used by other agencies from which the Bank could usefully learn.

8. Mr. Cooper took the opportunity to say that there should be a review, not simply of the Bank's Research Program, but also of all non-project work undertaken by the Bank. He acknowledged the difficulty in defining the activities which should come under the general heading of research. He suggested that we might overcome this problem by using three or four alternative definitions, and showing the cost associated with each definition, so that these activities could be reviewed in their "total context". He also noted that it was important to know the overhead cost as well as direct cost of these activities.

9. Mr. McNamara responded by saying that more information should be included in future annual report of the research program about the cost of different kinds of research. He agreed that we could also show more about overhead costs: he noted that we had a fair amount of information already about overhead costs and standards for such costs, for example, the amount of expenditures for telecommunications or travel per manyear. What was more difficult, he said, was to establish cost standards in relation to output--number of professional manyears per project or per report issued. Mr. McNamara went on to say that the budget document this year would contain a good deal of information on this subject.

10. Mr. Wahl noted that the presentation of costs against each research project in the document showed only the allocations from the external research budget, and that it would be much more useful to have total costs, including internal costs, in each case. He also wondered why internal costs of research had risen while the external research budget had remained constant. There was no direct response to his suggestion that "total costs" be shown for each research project, but I see no reason why this should not be done in future. Mr. McNamara pointed out that the rising cost of internal research were at least partly to take account of rising

price levels, and he went on to say that there was no very good basis for establishing the total amount which the Bank should spend on research. The figures had been held almost constant for the last two or three years, on an essentially arbitrary basis, and before that had been initially established on an essentially arbitrary basis. He did not know of any better way of doing it.

JBlaxall:cbm

cc: Messrs. Adler (o.r.)
Bowron (o.r.)
Wood
Mates
B. King, DPS
Mrs. Feldstein

Research
gm

Form No. 27
(3-70)

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

# OUTGOING WIRE

TO: MR. RAJ KRISHNA
5 MALKAGANJ
DELHI 110007

DATE: JANUARY 16, 1976

CLASS OF SERVICE: LT / Rus (EXT 4556)

COUNTRY: INDIA

TEXT:
Cable No.:

RAVI HAS TOLD ME OF YOUR STUDY ON EMPLOYMENT IN INDIA ZAMBIA AND PERU STOP WE ARE AT THE BEGININNING OF TWO POLICY STROKE ISSUES PAPERS ONE ON URBAN EMPLOYMENT THE OTHER ON RURAL NON-FARM EMPLOYMENT STOP WE WOULD LIKE TO FINANCE INPUT FROM YOU INTO EACH OF THESE DURING THE NEXT FEW MONTHS COMMA DRAWING ON INDIAN DATA STOP WE ARE TALKING SEPERATELY WITH MCPHEARSON ABOUT ZAMBIA AND PERU STOP

RE RURAL NON FARM IN INDIA WE ARE PARTICULARLY INTERESTED IN EXTENT AND GROWTH OF NON FARM EMPLOYMENT AND EARNINGS COMMA INTERACTIONS WITH AGRICULTURE COMMA EVIDENCE OF GROWTH OF ACTIVITIES IN LARGE VILLAGES AND TOWNS FORMING LOCI OF NEW URBAN GROWTH CENTRES COMMA AND GENERAL DESCRIPTIVE MATERIAL ON SIZE AND CHARACTERISTICS OF NON FARM ACTIVITIES STOP OUR REQUIREMENTS ON THE URBAN SIDE COMMA APART FROM DATA ON SIZES OF FIRM INCOME LEVELS AND OWNERSHIP STATUS AT TWO DIGIT LEVEL OR ABOVE COMMA ARE STILL BEING DEFINED STOP IN ANY CASE ON BOTH PAPERS WE WOULD WANT YOUR OWN VIEWS REGARDING WHAT MATERIAL AND FACTORS ARE RELEVANT STOP

**NOT TO BE TRANSMITTED** (Continued on Page 2)

AUTHORIZED BY:

NAME: Dennis Anderson

DEPT.: Development Economics

SIGNATURE: D. Anderson.
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: DA:krt

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

For Use By Communications Section

Checked for Dispatch:

Form No. 27
(3-70)

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

# OUTGOING WIRE

TO: MR. RAJ KRISHNA
5 MALKAGANJ
DELHI 110007

DATE: JANUARY 16, 1976

CLASS OF SERVICE: LT (EXT 4556)

COUNTRY: INDIA

: PAGE 2 :

TEXT:
Cable No.: WILL SEND YOU MORE MATERIAL AND SET UP CONTRACT FOLLOWING YOUR REPLY STOP OUR TIME HORIZON FOR THE WORK IS END JULY COMMA PERHAPS INVOLVING YP TO TWO MONTHS OF YOUR TIME (IF THIS IS ACCEPTABLE) PLUS LOCAL ASSISTANCE FOR YOU STOP HOWEVER WE ARE FLEXIBLE APART FROM JULY DEADLINE SO INDICATE WHAT YOU THINK WOULD BE NEEDED ON YOUR SIDE STOP WILL BE VISITING ASIA IN MARCH SO CAN VISIT YOU TO DISCUSS MATTER MORE FULLY THEN STOP REGARDS

DENNIS ANDERSON

**NOT TO BE TRANSMITTED**

AUTHORIZED BY:

NAME: Dennis Anderson

DEPT.: Development Economics

SIGNATURE: Dennis Anderson
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: DA:krt

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

For Use By Communications Section

Checked for Dispatch:

Form No. 37
(5-70)

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE CORPORATION

# OUTGOING WIRE

TO: MR. RAJ KRISHNA
5 MAHARAJANI
DELHI 110007

DATE: JANUARY 16, 1976

CLASS OF SERVICE: LT
(EXT 4559)

COUNTRY: INDIA

TEXT:
Cable No.

: PAGE 2 :

WILL SEND YOU MORE MATERIAL AND SET UP CONTRACT FOLLOWING YOUR REPLY
STOP OUR TIME HORIZON FOR THE WORK IS END JULY COMMA PERHAPS
INVOLVING YP TO TWO MONTHS OF YOUR TIME (IF THIS IS ACCEPTABLE) PLUS
LOCAL ASSISTANCE FOR YOU STOP HOWEVER WE ARE FLEXIBLE APART FROM JULY
DEADLINE SO INDICATE WHAT YOU THINK WOULD BE NEEDED ON YOUR SIDE STOP
WILL BE VISITING ASIA IN MARCH SO CAN VISIT YOU TO DISCUSS MATTER MORE
FULLY THEN STOP REGARDS

DENNIS ANDERSON

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME: Dennis Anderson

DEPT.: Development Economics

SIGNATURE: Dennis Anderson

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE: DA:KFE

CLEARANCES AND COPY DISTRIBUTION:

For Use by Communications Section

Checked for Dispatch

DISPATCHED

JAN 16 7 08 PM 1976
COMMUNICATIONS

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Research
BM

January 16, 1976

Mr. Daniel L'Huillier
C.R.E.T.
Chateau La Farge - Route LesMilles
13 290 LesMilles-Aix-En-Provence
France

Dear Mr. Huillier,

Peter Watson, a colleague working in my division, mentioned you (and your institute) to me as a possible source of consulting assistance on a research project we have been undertaking in Madagascar. The attached copy of a letter to Mr. Bonnal describes briefly the type of person we are looking for, and what the work would encompass. (I should perhaps add, that the reason we are looking for someone at this relatively advanced stage of the project is that the consultant originally selected proved not acceptable to the new Government authorities in Madagascar, presumably because of identification with the earlier regime.)

The consultant expert would supervise the young Swiss economist and the Malagasy counterpart who are expected to undertake detailed analyses of the data from the base - and followup surveys. (As currently planned, this would be done in Zurich - although there is some flexibility on this). The junior researchers should provide drafts on certain aspects of the study, under the senior consultant's guidance, but the latter would be responsible for the preparation of the draft final report. This should be completed by July 1976.

The input we are looking for would thus be several days during February and March to set up the detailed computer analyses of the data from the household/trader/traffic surveys, and a fairly fulltime commitment during the period April-to-June to produce the draft final report (in French) of the findings of the study.

I will telephone you early in the coming week (Tuesday) to find out whether you may be in a position to assist us.

Yours sincerely,

B.M.

Brigitta Mitchell
Transport Research Division
Transportation and Urban Project Department

BMitchell:bds

Research

# OFFICE MEMORANDUM

TO: Mr. H. Vergin

DATE: January 16, 1976

FROM: Steve Ettinger

SUBJECT: Economic and Social Cost-Benefit Analysis: Case Studies of Agricultural Credit Projects in Colombia and Turkey

1. These case studies tend to confirm the view that the "new methodology" is too sophisticated and complicated to be worth using in toto in most agricultural credit projects. As I see it, such an approach has the following disadvantages.

a) It requires excessive staff time for only marginal benefits. Eight additional man-weeks were needed for the Turkey project (only 2 of which were attributable to lack of experience with the new method). The requirements for both data collection and analysis are considerably greater than under the present methodology.

b) It widens the intellectual gulf between the economists doing the analysis and both other Bank staff members and, more importantly, officials in the borrowing countries. At a time when many of the latter are first coming around to accept the present Bank economic cost-benefit approach, it might be counter-productive to scare them off with our "new methodology".

c) In many cases, so many highly dubious assumptions would be needed, that little reliability could be ascribed to the results. For example, we do not usually know a priori what the average income levels of the sub-borrowers under our agricultural credit projects would be, nor how project benefits would be divided between farmers and processors (e.g. under the Philippines Grain Processing Projects), nor what portion of the increased income would be consumed (e.g. what is the marginal propensity to consume of Philippines' rice millers?).

d) In the effort to be comprehensive in our cost-benefit analysis, we may lose sight of the critical economic issues in particular projects.

2. While there is need to improve our present methodology, especially to increase consistency across sectors and regions, a more modest approach is probably desirable. In particular with regard to the economic analysis section of each of these case studies, it appears that there is usually little benefit in going beyond a proper treatment of the shadow wage rate and shadow exchange rate. The calculation of additional "conversion factors" had only marginal effect on the economic rates of return. In particular projects, where another domestic input (e.g. power) was of crucial importance, it might be worthwhile following the "new methodology's" de-composition procedures. To require this across-the-board, however, would not make sense.

3. The introduction of social analysis is, of course, a way of trying to incorporate projects' effects on income distribution and on investment into the cost-benefit framework. As such, it can perform a useful function in making people think more concretely about the distribution of project benefits and, in some cases, about the trade-offs between growth and distribution. Nevertheless, it is difficult to see how the calculations themselves would improve project formulation. Furthermore, in the absence of general agreement on what value "n" should have (i.e. on how much weight should be given to poor peoples' consumption vis-a-vis that of rich people), and in view of the general lack of the necessary data for the social cost-benefit calculations, it is not likely that we could at this point establish agreed criteria for the acceptance/rejection of projects based on their social rates of return. For the present, it might be better to concentrate on collecting better data on our projects' income-distribution effects, and not rush to make social-rate-of-return calculations based on wild guesses.

4. I regret that I have not had time to review adequately the case studies' analysis, coverage of issues and presentation, as requested by Mr. Ray. The analysis and presentation generally appear, at first glance, to be satisfactory. Unfortunately, they are probably fully comprehensible only to the minority of the Bank's economists who are well-acquainted with the new methodology. This is not the authors' fault, however, as to make them more widely understandable would require a lengthy methodological treatise, which is hardly suitable for an appraisal report. The coverage of issues appears quite limited, especially in the Colombia case study, which does little more than briefly explain the methodology and give the results. Since both projects produced quite satisfactory economic and social returns, under both old and new methodology, there was no need to grapple with the thorny question of what to do when one of the rates of return comes out uncomfortably low.

cc: Mr. R. L. Powell

SJEttinger:esr

Research ge

Mr. Hollis B. Chenery

January 16, 1976

Bela Balassa

Western Africa Research Project Follow-Up

I enclose a copy of the response I received to the above memo, dated January 6, from Mr. Michael Payson, Senior Economist in Country Programs Department II of the Western Africa region. It requires no comment except for noting that the proposed study on Cameroon would be additional to those referred to in Para 2 of my memo. Thus far, studies on Niger and Upper Volta have been suggested, both of which belong to Country Programs Department I.

cc: DPS Directors, DRC Senior Staff, Research Committee

Enclosure
BBalassa:nc

FORM NO. 75
(7-73)

WORLD BANK GROUP

| ROUTING SLIP | DATE Jan 9 |
|---|---|
| NAME | ROOM NO. |
| Mr. Balassa | |
| | |
| | |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

REMARKS

Ref. your memo of Jan 6, here's another request for a DRC study on Cameroon, which is my part of the draft CPP to be reviewed by McNamara next month.

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| M. Payson | C302 | 2688 |

Attachment to draft CPP of Jan 4, 1976

W. Payne



ECONOMIC AND SECTOR WORK PROGRAM

1. Current Status FY76

Sector work has been comprehensive through FY76, but has concentrated mainly on investment decisions within the existing set of policies. Last fiscal year sector reports were prepared or issued in green cover on industry, agriculture and water supply and sewage. This fiscal year, in connection with the mission to prepare the Special Report on Cameroon's Public Investment Program annexes were drafted on the rural sector, the urban sector, transportation, power, education and migration. The work concerned mainly project priorities for public investment. In addition, as part of the mission, a separate draft was completed evaluating treasury, public enterprise, and central government budgetary data. The Special Report will be issued in green cover in February 1976; the annexes are available in white cover internally.

2. FY77

In FY77 we plan a memorandum on the current economic situation for CPP and President's Report purposes and a separate exercise to prepare estimates of the efficiency and social prices to be applied in project evaluation. The latter will require some additional staff and support from CPS.

3. FY78 and 79

The differences in geographic and economic conditions which characterize Cameroon's internal regional structure, as well as the movement of people among regions and towards the urban centers, call for an assessment of regional development strategies emphasizing employment, migration, urban development, and sectoral policies and opportunities appropriate to regional resource availabilities and constraints. Initial reviews of

migration and the urban situation have been completed, but need to be pushed further to identify policy and program options. The size and regional structure of Cameroon are such that in this Department it is the prime case of a country where analysis of the spatial location of economic activity could reveal significant policy alternatives. Such a study, which could be started towards the end of FY77 or early FY78, would require support from CPS and DPS.

The Balassa studies on effective protection, incentives and domestic resource costs have proved useful in evaluating government policies and programs in West Africa. In Cameroon, which is the dominant member in UDEAC, a similar study is needed, not only to help assess efficiency and resource allocation but also to provide guidance on the costs and benefits of a revised system of investment incentives, which is recommended by the latest economic mission. Such a study, limited to one country, would require less manpower than the West African study, but would still need substantial DPS support. The study, if agreed, should be started towards the end of FY78 or early FY79.

4. FY80

Assuming progress is made on the issues described above, a basic mission could be planned in FY 1980 which would review achievements under the July 1976-June 1981 development plan in the light of our findings and evaluate policy and program alternatives for the next five year period. The report would be completed in FY81.

5. Conclusion

The foregoing work program assumes a major increase in staff from outside the Region to address basic economic issues which cannot readily be dealt with by Programs and Projects Department economists in the course of regular country and projects work. Such support has been given to other countries in this Region and elsewhere with demonstrable impact on our capacity to evaluate development policy in them. Since Cameroon is one of the most important clients in the Region and has significant development potential, such country concentration appears appropriate during the coming planning period. If this approach is accepted in principle, manpower estimates will be prepared prior to final management review.

Research gen

Mr. Benjamin King, Research Adviser DPS January 14, 1976

Francesco Abbate, Economist, LAC II

BRAZIL - Research Proposal

1. Please find attached a research proposal sent by Professor Pastore on growth and family income distribution in Brazil. Our Department does not intend to sponsor the study for the following reasons:

a. Since about 50 per cent of the research work has already been completed, the project does not seem to fit in the Bank's collaborative research activity.

b. The proposed study overlaps to a great extent with our research project (No. 670-69), "Growth and Income Distribution in Brazil."

2. Although the subject of the research -- the trade-off between growth and income distribution -- is very appealing, we do not think that the World Bank should finance another modelling exercise in Brazil. I am sending the proposal to the EPD and DRC for comments which I hope to receive before my departure for Brazil on February 9. As you know, Mr. Chenery is going to meet with Prof. Pastore in Sao Paulo on February 16.

Attachment

Cleared in substance with and cc: Messrs. Skillings
Greene

cc: Messrs. Duloy, DRC
Norton, DRC
Scandizzo, DRC
Gupta, EPD

FAbbate:lh

Research gen

January 13, 1976

Mr. Rakesh Mohan
Department of Economics
Princeton University
Princeton, N.J. 08540

Dear Rakesh,

Your recent note brings up two items we might put our heads together about. First, I already took the liberty of sending your vita (October 1974 version) to Bill Doebele, about a month ago. I am scheduled to talk to him this week and will ask whether he would like an updated version. (By the way, have you decided to change the authorship of the "Land and Poor" paper, or should it be "RM with OFG?").

This brings up the second point. The urban staff of the Bank's Economic Development Institute (EDI) would like to use part of the Land and Poor paper (specifically, Chapter III: Improving Access to Land for the Urban Poor, and the bibliography) as required reading for its course on "Managing Urban Growth" to begin in May. Their representative has edited a handful of minutiae, typically the references to other parts of the paper (p. 20) and to the figures (p. 25). I will supply the correct housing reference on page 30. He also proposes a brief cover memorandum, which I will revise, stating that the paper is a part of Bank efforts to improve conditions of the urban poor, and that it represents personal views not those of the Bank.

Do you have any objections to using the paper in this way? And how would you prefer that authorship be attributed? I'd appreciate your letting me know shortly.

All the best, as always.

Sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

OFG/cw

Research gen

Mr. H. B. Chenery

January 12, 1976

Benjamin B. King BBK

Western Africa Research Project Follow-up

1. In his memo of January 6, Bela raises an important question, which needs general as well as specific consideration. How is follow-up to research to be financed (as well as manned)? As he says, it is not the first time it has been raised and I am very sure it is not the last.

2. We have followed the principle that the research budget is for research and not for dissemination or operational application. However, this principle is tempered by the use of small amounts of seed-money to get things going. Normally, the Department concerned contributes too. An example is Ardy Stoutjesdijk's project on fertilizer programming in Egypt (under 670-24); the collaborating Department was Industrial Projects. But this is tantamount to a loss-leader; it is not an answer.

3. It is likely that there will be more demands from the Regions. If so, it would seem logical to incorporate these demands into the CPP system, so that they can be identified and discussed in context. The necessary budgetary allocations could then be made to the Regions. This would not necessarily solve every problem, because some might come at short notice, but it might help to systematize the greater part of the needs.

cc: Karaosmanoglu 1/
Duloy
Balassa
J. Adler 1/
ul Haq 1/
S. Chernick 1/
O. Grimes 1/

1/ with copy of Balassa's memo.

BBK/cw

Research General BG.

FORM NO. 27
(11–75)

WORLD BANK / IFC
**OUTGOING MESSAGE FORM**
**(TELEGRAM/CABLE/TELEX)**

X IBRD
IDA
IFC
ICSID

TO: STEVENS

FINANCE

COUNTRY: GABORONE

CABLE NO. & TEXT: BOTSWANA

DATE: JANUARY 12, 1976

ORIGINATOR'S EXT.: 2820

CLASS OF SERVICE: TELEX

WU

RE RURAL INCOME DISTRIBUTION SURVEY. DOV CHERNICHOVSKY OF BANK STAFF IS PROPOSING TO VISIT BOTSWANA FROM ABOUT JANUARY TWENTY TO FEBRUARY FIVE IN CONNECTION WITH ABOVE SURVEY. DEREK HUDSON HAS BEEN INFORMED. GRATEFUL YOUR CABLING IF TIMING CONVENIENT REGARDS JORDAN

RPO #

**NOT TO BE TRANSMITTED**

| | |
|---|---|
| REFERENCE: BOTSWANA: Rural Income Distribution Survey | AUTHORIZED BY (Name): Deane Jordan |
| DRAFTED BY: Deane Jordan:vs | DEPARTMENT: EA2DB |
| CLEARANCES AND COPY DISTRIBUTION: cc: Messrs. Chernichovsky Boucher | SIGNATURE (Of individual authorized to approve): D Jordan DJ |
| | SECTION BELOW FOR USE OF CABLE SECTION |
| | CHECKED FOR DISPATCH: WW |

PINK - File Copy; WHITE - Transmittal Copy; YELLOW - Bill Copy

Francis L. Russell

☒ IBRD
☐ IDA
☐ IFC
☐ ICSID

WORLD BANK / IFC
OUTGOING MESSAGE FORM
(TELEGRAM/CABLE/TELEX)

FORM NO. 27
(11-73)

TO: STEVENS

FINANCE

COUNTRY: GABORONE

CABLE NO & TEXT: BOTSWANA

DATE: JANUARY 12, 1976

ORIGINATOR'S EXT.: 2820

CLASS OF SERVICE: TELEX

RE RURAL INCOME DISTRIBUTION SURVEY. DOV CHERNICHOVSKY OF BANK STAFF IS PROPOSING TO VISIT BOTSWANA FROM ABOUT JANUARY TWENTY TO FEBRUARY FIVE IN CONNECTION WITH ABOVE SURVEY. DEREK HUDSON HAS BEEN INFORMED. GRATEFUL YOUR CABLING IF MEETING CONVENIENT REGARDS JORDAN

NOT TO BE TRANSMITTED

REFERENCE:

BOTSWANA: Rural Income Distribution Survey

DRAFTED BY: Denis Jordan

CLEARANCES AND COPY DISTRIBUTION:

cc: Messrs. Chernichovsky
Boucher

APPROVED:

SIGNATURE

BELOW FOR USE OF CABLE SECTION

CHECKED FOR DISPATCH

DISPATCHED

JAN 12 10 09 PM 1976
COMMUNICATIONS SECTION

PINK - File Copy; WHITE - Transmittal Copy; YELLOW - Sec. Copy

Research General

Mr. Enrique Lerdau, LCN

January 7, 1976

Orville F. Grimes, Jr., VPD

Self Management Research Proposal

Following our conversation, it is now clear that this proposal will not be submitted in time for the Research Committee meeting later this month. There is thus no need to meet next week as a Review Panel. But in line with our intention to widen the time available for scrutiny of proposals before they are formally submitted, would you nevertheless be willing to chair an Advisory Group that the researchers can draw upon periodically before (and, ideally, after) submission of the proposal? This should involve at most one or two meetings with the sponsors, to give guidance on issues and methodology, over the next two months or so. When the proposal is ready to be sent forward, the Advisory Group will constitute an especially well-informed Review Panel and can meet for a definitive judgment.

cc: Mssrs. B. B. King
J. Simmons
C. Senf

OFG/cw

Research General

Goodard Winterbottom January 7, 1976

Benjamin B. King, VPD

Clearance of Book Rights from Journals

1. A list of possible additions is attached. It is rather low in European journals. Perhaps there are others, e.g. what journal did Waezbroeck's latest article appear in?

2. This raises a rather general question. Who, if any one, maintains a register of articles published by Bank Staff, whether reprinted or not?

3. There might be some value in tapping the experience of other agencies. The Fund is one possibility. AID is another. Bob Muscat wrote me some time ago about their concern with the problem and invited cooperation. He promptly left AID, but I could call his successor, who is now in situ.

4. I think the subject has a legal tinge and perhaps we should get the lawyers' advice. The lawyer, to whom we refer problems related to research, is Lowell Doud (2255), but maybe you have a publicity specialist of your own.

5. Comments, if any, on the draft later.

BBK/cw

cc: O. Grimes, Jr.
J. Merriam

Attch

## Additional Journals

### Urban

Urban Studies (UK)
Journal of Urban Economics
Land Economics
Annals of Regional Science
Journal of Regional Science
Ekistics (article by Haldane and Madavo [TUPD] appeared here a year or so ago)

### Public Finance

National Tax Journal
Public Finance
Public Finance Quarterly

### General/Development

Journal of Developing Areas
Journal of Development Studies
Review of Income and Wealth
Review of Economics and Statistics
Journal of Economic Literature (same as AER?)

### Population and Human Resources

Journal of Human Resources

### Other

Bell Journal of Economics & Management Science

Research General

P. N. Damry, Secretary

January 7, 1976

B. B. King, Research Adviser BBK

Dr. Sen's Research Proposal On Public Enterprises

1. I have ascertained from Larry Westphal where we stand on this stubborn thorn in our flesh. I gather that you plan in the near future to have a personal talk with Dr. Sen about it, which seems a very good idea. Before you do so, I would like to have the chance of stating my own views.

2. I have not had any direct involvement in the case, but have followed it closely. My interest is general rather than particular. The principle that all research proposals submitted through the established procedure receive equal treatment, no matter what their origin may be, should not be violated. If concessions are made in this case, we cannot tell where they will end. Personally, I feel that enough concessions have been made already in this case, though that might be arguable on tactical grounds.

3. I made a few more specific points in a somewhat acerbic memorandum to Ravi Gulhati, which I attach. This referred to a draft memo to Mr. McNamara, which was substantially the same as the one he sent to you on November 26.

4. I would be grateful if you would give me a call (6001) at your convenience in case there is anything that still needs clarification.

BBK/cw

cc: H. B. Chenery
L. E. Westphal

Mr. R. Gulhati, ECDDR November 25, 1975

Benjamin B. King, VPD

Dr. Sen's Proposal

1. In your draft memorandum of November 24, it might be worth mentioning in para. 2 that the IDRC study is one in which a number of countries are participating, among them India. IDRC makes a big thing about the projects they finance being the countries' own ideas.

2. It has never been clear to me whether Dr. Sen's proposal is his own or has some official backing from the Indian Government. If it is the former, then we are faced with a situation in which an Executive Director is trying to ram his own pet ideas down our throat. What if they all did it? If the proposal does have the support of the Indian Government, it doesn't necessarily make it any better, but one could at least start asking what sort of concerns there are in India about the problem and, even more, what institutions are prepared to open their books to us, if any sort of proposal were to go through.

3. This raises the question of sensitivity of this whole subject. The principal value of the IDRC's project is that a number of countries have gone into it voluntarily. I think the memorandum could say a little more about this subject, especially if we do not really know whether Dr. Sen is speaking on his own or not.

4. Paras. 5 and 6 in your memorandum really begs the question as to whether we should go on with this before Mr. McNamara has pronounced on it. My own impression is that the memorandum is far too conciliatory in the face of outrageous conduct, but perhaps that is part of the strategy.

5. Who is supposed to pay for this? Suppose you do reconsider and come up with something, will you submit it to the Research Committee? Or will it come out of Mr. McNamara's Contingency Fund? Or Dr. Sen's, since he seems to think he has one?

cc: Messrs. Chenery
Westphal

BBKing:gm

Research gen

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

# OFFICE MEMORANDUM

TO: Messrs. Chaufournier and Chenery

DATE: January 6, 1976.

FROM: Bela Balassa

SUBJECT: Western Africa Research Project Follow-Up

1. A possible gauge of the success of a research project is the demand it generates for future applications and the impact it has on operational work. The experience of the Western African research project, covering Ghana, the Ivory Coast, Mali, and Senegal, has been positive in these respects; however, success brings its own problems as the follow-ups need financing which is not provided either in the research budget or in the budget of the Regional Office. This problem is not limited to the Western Africa project; it has arisen and it is bound to arise in the future, with regard to other research projects as well. Thus, while it will be considered below in the context of research on Western Africa, there appears to be need for a general solution to the problem in the budgetary process.

2. The suggested follow-ups of the Western African research project are described below:

(a) The French Ministry of Cooperation has requested a detailed description of the methodology of the research project in French for training purposes. The Ministry's interest lies chiefly in the application of the methodology to project evaluation as an alternative to the so-called Method of Effects that is presently used in most francophone countries.

(b) The Planning Ministry of the Ivory Coast has requested that we provide them with the detailed data and assumptions used in the calculations for individual firms in the Ivory Coast study and that we send an expert to the Ministry for a period of 2-3 months to teach the application of the method.

(c) Following a request received from the Government of Mali, the Western Africa Regional Office has proposed the application of the methodology to the evaluation of investment projects under the next five-year plan. Furthermore, the Regional Office has decided to explore the possibility of the Bank financing a textile mill in Mali on the basis of the results reached in the Mali study.

(d) Following discussions between the representatives of the Regional Office and the Ministry of the Plan in Senegal, the services of an expert have been offered to assist the Government in reforming the tariff system, with reliance based on the results of the Senegal study.

(3) The Regional Office has suggested that additional country studies be carried out.

3. The status of implementation of the requested actions is as follows:

(a) The writing of the detailed methodology has been completed; it also includes a comparison of the method applied with the Method of Effects. Translation into French is under way; the paper will be discussed in Paris in late January.

(b) Providing the detailed data and assumptions on a firm-by-firm basis would entail several months of work by a French-speaking assistant and require budgetary allocation. Such allocation would also be necessary for detailing an expert to Abidjan.

(c) Work will be undertaken in the framework of the next economic mission to Mali, with the participation of researchers involved in the research project.

(d) The financing of sending an expert to Senegal is not yet assured.

(e) There is presently no financing available to carry out additional country studies.

cc and cleared with Messrs. de Azcarate and Duloy

cc: Messrs. de la Renaudiere, Thalwitz, Wright
Bottelier, Payson, Bachmann
den Tuinder, de Leede, Koppen, Joshi
Moore, Thadani, Hyde, Westphal
DPS Directors, DRC Senior Staff, Research Committee

BBalassa:nc

Research general

DOCUMENT OF
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

NOT FOR PUBLIC USE

FOR EXECUTIVE DIRECTORS' MEETING



For consideration on January 27, 1976

R75-256/1

FROM: The Secretary

December 31, 1975

ANNUAL REPORT ON BANK RESEARCH

behind file

Attached, in connection with the President's Memorandum and Report on the Bank Group Research Program (R75-256) distributed on December 31, 1975, is a booklet entitled "World Bank Research Program - Abstracts of Current Studies".

Distribution:

Executive Directors and Alternates
President
Senior Vice President, Operations
Executive Vice President and Vice President, IFC
President's Council
Directors and Department Heads, Bank and IFC

Research
Gen

Mrs. F. Stone, Personnel

December 30, 1975

Benjamin B. King, VPD BBK

RESEARCH CONTRACTS

1. As a couple of recent examples demonstrate, once the contract or letter of appointment for a research project is sent out it is a bit late to discover that one or more modifications could usefully have been made. I feel it would be beneficial (and not, I trust, too time-consuming) for Orv Grimes and me to have a look routinely at draft contracts and letters of appointment involving research projects before they go out. This will help to head off problems before they arise, saving all of us time and headaches in the long run. As a minor but potentially important illustration, we can ensure that the letter refers specifically to the particular code (671-xx) of the project. We would also appreciate a copy of the letter or contract as sent.

2 Please let me know if you see any problems with this procedure.

cc: Ms. N. Lenthe, Personnel
Mr. T. Mitchell, Controller's
Mr. O. Grimes, VPD

BBK/cw

Rejected Proposal

December 24, 1975

Dr. James Blackman
National Science Foundation
1800 G Street N. W.
Washington, D.C. 20550

Dear Dr. Blackman,

I have canvassed opinion in the appropriate parts of the Bank on Nabil Khaldi's proposal. As I expected, there is not much interest in it here. Indeed, this is very likely to be the case with proposals coming at us out of the blue.

Perhaps I could explain to you over lunch here some time soon. Please give me a call (477-6001) to fix a date.

Best wishes for 1976.

Yours sincerely,

Benjamin B. King
Research Adviser
Development Policy

BBK/cw

Research General

Mr. U. K. Ghoshal, Secretary's

December 23, 1975

Hollis B. Chenery, VP-DP

Distribution of Research Annual Report and "Abstracts" Booklet

We have received Mr. McNamara's approval to distribute the annual review of the research program on December 30 for discussion at the Board Meeting of January 27, 1976. This report will be sent to the Print Shop today. In addition, the revised World Bank Research Program: Abstracts of Current Studies booklet has been printed and is available from the Information and Public Affairs Department.

I would therefore appreciate it if you could arrange for distribution of both these documents on December 30. Your suggestion to prepare separate Secretary's Memoranda, each saying that the other report is being distrubuted concurrently, seems appropriate.

cc: Mr. B. B. King, VPD
Mr. O. Grimes, VPD
Mr. J. Merriam, I&PA
Mr. D. Bahl, I&PA

RESEARCH-GEN.

File December 23, 1975

Mona Hazzah MH

EXTERNAL RESEARCH BUDGET TRANSACTIONS PROCEDURE

As per my telephone conversation with Jane Feldstein, it was agreed that all External Research Budget correspondence should be copied to Mr. Paul Bowron where they would be appropriately channeled within P & B.

cc: Mr. B. King
Mr. O. Grimes
Mr.sJ. Feldstein

MH/cw

FORM NO. 75
(7-73)

WORLD BANK GROUP

| ROUTING SLIP | DATE 12/23/75 |
|---|---|

| NAME | ROOM NO. |
|---|---|
| Mr Benjamin B. King | |
| | |
| | |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

REMARKS

Please see attached comments.

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| Colin Bruce | D-803 | 3691 |

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

# OFFICE MEMORANDUM

TO: Colin Bruce

DATE: December 23, 1975

FROM: A. Egbert A.E.

SUBJECT: Comments on Research Proposal of Nabil Khaldi

This proposal is not well specified. Moreover, a statement in the first part, para 2, page 2, indicates that the author does not understand the standard interpretation of production functions with respect to technological change.

I would recommend that before anyone considers funding this project, at the minimum, the author be required to submit a detailed proposal that would clearly indicate his adequate understanding of the methodology and that would present a sufficient program for obtaining the requisite data. Finally, I doubt that this type of macro research using secondary data can tell us very much about development processes. I think it would be more productive to focus on primary micro data. Aggregation and measurement problems would be critical in the analysis proposed.

AE:et

Research Gen.

A. Churchill

December 22, 1975

Benjamin B. King VPD

SEATAC STUDIES

I attach a copy of the cover page of the study I mentioned together with page 14, which says that the Bank will be on the Steering Committee. I am afraid that, as I said, I have no idea how this landed on my desk. It would be helpful if we could track down what is going on and whose idea this is.

There was also a second study, whose cover page I also attach. Both studies are high on income distribution effects.

BBK/ci

cc: P. Hasan
E. Hawkins
H. Vergin
M. Ahluwalia
O. Grimes

Enc

Signed B. B. King

SOUTHEAST ASIAN AGENCY FOR REGIONAL TRANSPORT
AND COMMUNICATIONS DEVELOPMENT

---

SEATAC WORKING PAPER 75/2

Issue No. 2

# NOTES ON UPGRADING LOCAL INDIGENOUS CRAFT

SEATAC
Kuala Lumpur
June, 1975

John Hakker
Naval Architect

SEATAC CODE: RR-2

# STUDY OF TRANSPORT INVESTMENT POLICIES AND IMPACT ON DISTRIBUTION OF INCOME, SPECIFICALLY IN REMOTE AREAS

## SUGGESTED TERMS OF REFERENCE



SEATAC-Kuala Lumpur
22 August, 1975

in general terms by a Steering Committee. Study administration will be undertaken by SEATAC. The entire study group will comprise the following:

1) Steering Committee
2) Local Study Teams
3) Central Analysis and Planning Team
4) SEATAC (Administration)

In general, the same participants will be retained for Phase I and Phase II of the Study. Specific assignments of each participating group are described below.

1) Steering Committee

The Steering Committee will provide general supervision with respect to the substance of the Study. The Committee will comprise at least seven members as follows:

a) SEATAC Officer-in-Charge of the Study
b) SEATAC Officer representing COORDCOM
c) Chief Economist, Central Analysis and Planning Team
d) Representative of ESCAP, Bangkok
e) Representative of the Asian Development Bank, Manila
f) Representative of the International Bank for Reconstruction and Development, Washington, D.C.
g) Others to be selected (e.g., representatives from donor agencies)

The Committee will meet at least on three occasions at SEATAC, K.L.; once before the Study participating teams are selected and then when the draft final report for each Phase has been submitted by the Analysis Team to SEATAC. The Committee may meet on other occasions, whenever the Study Director sees fit.

2) Local Study Teams

A Local Study Team will have to be established in all participating SEATAC countries. A desirable composition of a Local Study Team is as follows:

a) Economist/Planner, from the Planning Ministry

Research General

December 19, 1975

Dr. Albert Zahra
Director, Division of Family Health
World Health Organization
Avenue Appia
1211 Geneva 27
Switzerland

Dear Dr. Zahra:

Our Department has just now received notice that the next meeting of the Bank's Research Committee will be held in late January 1976, with completed proposals to be submitted before January 7, 1976. With this date in mind, I am inquiring about the status of the WHO proposal to study the effects of family formation on family health in Ghana.

I appreciate that the January date might be too early for your staff and their Ghanaian counterparts to finalize the proposal. Please keep us advised as to the progress of this work and likewise, we shall inform you of the Bank's schedule for review of research proposals after the January meeting. (This date will probably be April 1976.)

With best regards.

Sincerely,

K. Kanagaratnam

K. Kanagaratnam
Director
Population Projects Department

CC: Mr. Baldwin, PNPD
Mr. Messenger, PNPD
Dr. Casazza, PNPD
Dr. Kim, PNPD
Mr. Cuca, Dev. Econ.
Dept/Div Files

KK/LJC/cb

WHO/PNP

Research file

Mr. Mervyn Weiner, DGO

December 18, 1975

Benjamin B. King, VPD Signed B. B. King

OED/Research Cooperation

1. I think there are two ways in which OED and ourselves could cooperate at little cost and without more ado.

2. First, when OED staff undertake any new investigations, we would be willing to identify any research, which might be potentially relevant. In return, when the investigation is finished, we would like to know what their findings were. In many cases, this could no doubt be done by simply sending us a copy of the report with a notation of the parts of it that would interest us.

3. Secondly, all research proposals put to the Research Committee are reviewed by a panel of Bank staff. We also in the future intend to have a panel review sometime after the project is completed, in order to see what lessons can be learned from the project in question. We would be happy to have OED staff serve on these panels; I would imagine that review after completion might be more interesting for you, but the two are not mutually exclusive. I think that we could identify reasonably well the sorts of projects that would interest you most; in any case, we could work this out over time.

cc: Messrs. Chenery
Willoughby
Grimes

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

# OFFICE MEMORANDUM

URGENT

**TO:** Mr. C. Bruce, AGP

**DATE:** December 18, 1975

**FROM:** Benjamin B. King, VPD

**SUBJECT:** Research Proposal by Nabil Khaldi

I routed a copy of a research proposal for comment, first to Dubey (EMENA) and then to Darnell. I understand it has been passed on to Darnell. In case it has got lost in the shuffle, here is another copy. Dubey's comments are attached; could I have yours?

Attachments

Mr Franzen
Mr Egbert

Could you please review and let me have your comments.

CB
12/19

FORM NO. 75
(7–73)

WORLD BANK GRO'

| ROUTING SLIP | DATE 12/19 |
|---|---|

| NAME | ROOM NO. |
|---|---|
| | |
| Mr. C. Bruce | |
| | |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

IARKS

Re attached Request for Research Program Funding.

① I have no way to fund it.
② My interest is only marginal as many "return to agro-biological* research" studies are currently emerging.
③ ICARDA might have an interest

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| Joe Nulet<br>IDRC, Canada | Jim F | |

TELEPHONE: 5298; 5406 & 7; 5395

TELEGRAMS: STATISTICS

REFERENCE: CSO. 11/7/1

REPUBLIC OF BOTSWANA

C. Binder R Research - Gen. BG

CENTRAL STATISTICS OFFICE

PRIVATE BAG 0024

GABORONE

18th December, 1975.

Mr. Robert Maubouche,
Senior Economist,
Country Programs Department,
Eastern Africa Regional Office,
International Bank for Reconstruction
and Development,
1818 H Street NW,
WASHINGTON DC 20433
United States of America.

JAN 5 REC'D

c.c.: Mr. Timothy King,
IBRD.

Dear Robert,

Thank you for your letter of 2nd December, 1975, which was most encouraging. We are working flatout to finalise the details of the layout of the cross-tabulation programmes, and will shortly be sending you and Mr. King a summary of the designs. You may also be interested in the enclosed paper, which shows the sequence of definitions that are to be used in compiling various kinds of income on a step by step basis.

The Manager of the Computer Bureau is attempting to hire an extra programmer here in Gaborone; she will work alongside the senior programmer who has already been working on our project for 12 months. In this way we plan to get everything ready for the Government Printer by mid February.

I will write again early in January when we have a clearer picture of our computer costs.

Yours sincerely,

for Claes Norlof
(D. J. Hudson),
Statistical Adviser.

CENTRAL STATISTICS OFFICE
PRIVATE BAG 0024
GABORONE

REPUBLIC OF BOTSWANA

TELEPHONE 3201 & 3 3201
TELEGRAMS: STATISTICS
REFERENCE: CSO. 11/1/1

18th December, 1975.

Mr. Robert Mauboucho,
Senior Economist,
Country Programs Department,
Eastern Africa Regional Office,
International Bank for Reconstruction
and Development,
1818 H Street NW,
WASHINGTON DC 20433
United States of America.

c.c.: Mr. Timothy King,
IBRD.

Dear Robert,

Thank you for your letter of 2nd December, 1975, which was most encouraging. We are working flatout to finalise the details of the layout of the cross-tabulation programme, and will shortly be sending you and Mr. King a summary of the designs. You may also be interested in the enclosed paper, which shows the sequence of definitions that are to be used in compiling various kinds of income on a step by step basis.

The Manager of the Computer Bureau is attempting to hire an extra programmer here in Gaborone; she will work alongside the senior programmer who has already been working on our project for 12 months. In this way we plan to get everything ready for the Government Printer by mid February.

I will write again early in January when we have a clearer picture of our computer costs.

Yours sincerely,

(D. J. Hudson),
Statistical Adviser.

MINUTE FOR FILE

CSO 11/7/1 24th November, 1975.

SYSTEM OF ACCOUNTS FOR THE

RURAL INCOME DISTRIBUTION SURVEY IN BOTSWANA

The system of accounts used in the RIDS is based on the UN publication, "statistics of the distribution of income, consumption and accumulation: draft guidelines for the developing countries", ref. E/CN.3/462 of 5th July 1974. This document in turn is based heavily on the Un's "System of National Accounts."

The definitions listed below are those which have been selected from the first publication, subject to the limitations imposed by the scope of the questionnaire used in the survey. The definitions are displayed as items in a set of double entry accounts, in accordance with international statistical conventions.

1. Definition of "Gross current receipts"

| | |
|---|---|
| | 1. Compensation of employees<br>a. Wages and salaries earned by HH members<br>i. In cash<br>ii. In kind<br>b. Imputed value of employer's hypothetical contribution to unfunded pension and gratuity schemes.<br>2. Ouput from entrepreneurial activities<br>a. Imputed rental benefit from owner-occupied dwellings<br>b. Unincorporated enterprises and quasi-corporate enterprises.<br>3. Other receipts<br>a. Transfers into the HH<br>b. Property income received |
| 4. Gross current receipts (+) | |
| Disbursements | Receipts |

Notes

1. HH = Household

2. Quasi - corporate enterprises are large partnerships and sole proprietorships, plus proprietory limited companies with not more than seven beneficial shareholders. Unincorporated enterprises include crop and cattle farming, beer brewing and trading stores; services such as transport and construction; hunting and gathering; rent received from renting out stores.

3. Property income is made up of interest, dividends from public limited companies, and dividends from from proprietory limited companies with more than seven beneficial shareholders.

4. The asterisk (+) is used throughout to indicate that the item next to it was not separately measured but was calculated as a residual so as to balance the table.

2/.....

2. Definition of "Net primary income"

| | |
|---|---|
| 6. Depreciation on assets used in entrepreneurial activities<br>7. Other running expenses<br>8. Other receipts<br>a. Transfers into the HH<br>b. Property income received<br>9. Net primary income (+) | 5. Gross current receipts |
| Disbursements | Receipts |

3. Definition of "Gross primary income"

| | |
|---|---|
| 12. Gross primary income (+) | 10. Net primary income<br>11. Depreciation on assets used in entrepreneurial activities |
| Disbursements | Receipts |

4. Definition of "Gross available income"

| | |
|---|---|
| 15. Motor vehicle and other casualty insurance premiums ; life insurance premiums<br>16. Interest paid.<br>17. Other payments<br>a. Transfers out of the HH<br>b. Local Government tax<br>c. Income tax<br>18 Gross available income (+) | 13. Gross primary income<br>14. Other receipts<br>a. Transfers into the HH<br>b. Property income received |
| Disbursements | Receipts |

5. Definition of "Final HH consumption expenditure"

| | |
|---|---|
| 20. Savings<br>a. Surplus crops in storage<br>b. Increase in size of herd<br>c. Undistributed profits of quasi-corporate enterprises<br>d. Estimated cash savings of upper income HHs<br>21. Depreciation on assets used in entrepreneurial activities<br>22. Final HH consumption expenditure (+) | 19. Gross available income |
| Disbursements | Receipts |

3/.....

6. Definition of "Total HH consumption"

| | |
|---|---|
| 25. Total HH consumption | 23. Final HH consumption expenditure<br>24. Subsidies to consumption due to free or reduced cost services furnished to HHs by Government |
| Total consumption of the rural population | Imputed total income of the rural population |

7. Detailed specifications

Each of the above concepts has to be spelled out in detail, in terms of the data asked for in the questionnaire. The specifications are in three groups, namely specifications for:

(i) upper income HHs, i.e. those HHs whose annual income was available from a sampling frame in Gaborone of incomes of upper income HHs,

(ii) HHs of employees of freehold farmers, whose annual incomes were also available from a sampling frame in Gaborone,

(iii) monthly HHs, i.e. those HHs whose income was obtained from monthly visits to a sample of HHs by enumerators in the field.

The proportions of the rural population covered by the above three groups are approximately 1%, 3% and 84%, respectively. The remaining 12% of the rural population was not covered by any of the sampling frames. This is the group who live where the population density is less than one person per square kilometre. Their incomes are to be estimated by first subsampling the incomes of the monthly HHs, and then making suitable adjustments.

8. Exmples of detailed specifications

Example (1) Gross current receipts from livestock husbandry (Upper income HHs)

= sales value of livestock that were sold
+ sales of meat of slaughtered animals
+ standard value of meat for own consumption
+ sales of milk and other animal products
+ standard value of milk and products for own consumption
+ standard value of milk used as wages for cattle herders
+ bonus paid to producers by the Botswana Meat Commission
+ dividends received from own cattle farming companies
+ undistributed profits retained in own cattle farming companies
+ (closing livestock inventory - opening livestock inventory), valued at farm gate prices and measured on 30/6/74 and 1/7/73, respectively.

/.....

Example (2) Gross current receipts from livestock husbandry (monthly HHs)

= sales value of poultry, pigs, donkeys, mules and horses that were sold
+ sales of meat of slaughtered poultry and pigs
+ standard value of chicken and pork for own consumption
+ sales of meat from deceased animals
+ standard value of meat from deceased animals consumed by the HH
+ sales of milk and other animal products
+ standard value of milk and products for own consumption
+ standard value of milk used as wages for cattle herders
+ total value of the weight gained by cattle, goats and sheep during the survey, adjusted pro-rata for animals not present in the herd for the entire 12 month period.

D.J. HUDSON
(Statistical Advisor)

Research General

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

# OFFICE MEMORANDUM

TO: Mr. B. B. King

DATE: December 16, 1975

FROM: Vinod Dubey

SUBJECT: Research Proposal by Nabil Khaldi

1. I apologise for the delay in responding. The paper had been sent on to the Program Divisions for reactions.

2. After discussion with the two divisions dealing with the fertile Crescent (CPDIA and CPDIIC), I conclude that there is little interest in the proposal. My own reaction also is somewhat skeptical given the present form of the proposal. At the same time studies of the agricultural sector in the Crescent countries should be of interest to the Region.

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

# OFFICE MEMORANDUM

Research

TO: Mr. A. Ray, VPS

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Project Status Report

I would appreciate it if you could have the attached Status Report Form for project No. 670-08 completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the form should be current as of December 31, 1975.

I am attaching a copy of the November External Research Computer Printout where necessary.

Attch.

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

# OFFICE MEMORANDUM

Research

TO: Mr. D. Greene, LAC II

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Project Status Report

I would appreciate it if you could have the attached Status Report Form for project No. 671-10 completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the form should be current as of December 31, 1975.

I am attaching a copy of the November External Research Computer Printout where necessary.

Attch.

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

# OFFICE MEMORANDUM

TO: Mr. P. Hasan, AENVP

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Project Status Report

I would appreciate it if you could have the attached Status Report Form for project No. 670-79 completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the form should be current as of December 31, 1975.

I am attaching a copy of the November External Research Computer Printout where necessary.

Attch.

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

Research agency

# OFFICE MEMORANDUM

TO: Mr. M. Yudelman, AGP

DATE: December 16, 1975

FROM: Mona Hazzah, VPD MH

SUBJECT: Research Projects Status Reports

I would appreciate it if you could have the attached Status Report Forms completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the forms should be current as of December 31, 1975. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the November External Research Computer Printout where necessary.

| | |
|---|---|
| 670-13 | A. Egbert |
| 670-14 | T. Goering |
| 670-89 | G. Donaldson |
| 671-22 | A. Egbert |
| 671-34 | F. Hotes |

Attachments

Remarks gm

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

# OFFICE MEMORANDUM

TO: Mr. E.V.K. Jaycox, TRU

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Projects Status Reports

I would appreciate it if you could have the attached Status Report Forms completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the forms should be current as of December 31, 1975. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the November External Research Computer Printout where necessary.

| | |
|---|---|
| 670-26 | B. Coukis |
| 670-27 | S. Agarwal |
| 670-29 | B. Mitchell |
| 670-71 | B. Mitchell |
| 671-13 | S. Agarwal |
| 671-14 | B. Mitchell |
| 671-15 | C. Harral |
| 671-16 | G. Beier |
| 671-20 | E. Holland/P. Watson |

cc: Mr. Rathnam (with attachments)

Attachments

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

Research gen

# OFFICE MEMORANDUM

TO: Mr. W. Tims, EPD

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Projects Status Reports

I would appreciate it if you could have the attached Status Report Forms completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the forms should be current as of December 31, 1975. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the November External Research Computer Printout where necessary.

| | |
|---|---|
| 670-07 | J. Waelbroeck |
| 670-68 | E. Sachse |
| 671-23 | J. Waelbroeck |
| 671-28 | J. Waelbroeck |

cc: Miss Gary (with attachments)

Attachments

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

Research fellow

# OFFICE MEMORANDUM

TO: Mr. Y. Rovani, PBP

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Projects Status Reports

I would appreciate it if you could have the attached Status Report Forms completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the forms should be current as of December 31, 1975. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the November External Research Computer Printout where necessary.

| | |
|---|---|
| 670-67 | R. Sheehan |
| 670-76 | J. Warford |
| 671-11 | J. Warford |
| 671-12 | H. Shipman |

Attachments

cc: Miss Peter (with attachments)

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

Research Fellows

# OFFICE MEMORANDUM

TO: Mr. J. Duloy, DRC

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Projects Status Reports

I would appreciate it if you could have the attached Status Report Forms completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the forms should be current as of December 31, 1975. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the November External Research Computer Printout where necessary.

| | |
|---|---|
| 670-01 | B. Balassa |
| 670-03 | M. Ahluwalia |
| 670-06 | M. Ahluwalia |
| 670-23 | A. Stoutjesdijk |
| 670-24 | A. Stoutjesdijk |
| 670-69 | R. Norton |
| 670-73 | G. Kutcher/P. Scandizzo |
| 670-83 | M. Ahluwalia |
| 670-84 | M. Ahluwalia |
| 670-85 | C. Chiswick |
| 670-86 | R. Norton |
| 670-87 | B. Balassa |
| 670-94 | M. Ahluwalia |
| 671-08 | M. Ahluwalia |
| 671-09 | A. Stoutjesdijk |
| 671-17 | P. Hazell |
| 671-27 | G. Pyatt |
| 671-29 | J. Duloy |
| 671-33 | M. Selowsky |
| 671-35 | B. Balassa |
| 671-36 | C. Chiswick |

Attachments

cc: Miss Gary (with attachments)

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

Research gen
Yellow

# OFFICE MEMORANDUM

TO: Mr. R. Gulhati, ECD

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Projects Status Reports

I would appreciate it if you could have the attached Status Report Forms completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the forms should be current as of December 31, 1975. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the November External Research Computer Printout where necessary.

| | |
|---|---|
| 670-43 | J. Lowther |
| 670-45 | J. Lowther |
| 670-70 | J. Linn |
| 670-80 | S. Reutlinger |
| 670-90 | A. Sant'Anna |
| 670-95 | L. Westphal |
| 670-96 | J. Meerman |
| 670-99 | R. Moran |
| 671-02 | T. King |
| 671-03 | T. King |
| 671-05 | V. Prakash |
| 671-06 | R. Gulhati |
| 671-07 | L. Westphal |
| 671-18 | J. Linn |
| 671-19 | J. Simmons |
| 671-24 | S. Reutlinger |
| 671-25 | S. Bery |
| 671-26 | T. King |
| 671-30 | L. Squire/S. Bose |
| 671-31 | R. Sabot |
| 671-32 | L. Westphal |

Attachments

cc: Mr. Lowther (with attachments)

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

# OFFICE MEMORANDUM

Research gen

TO: Mr. D. Ballantine, EDP

DATE: December 16, 1975

FROM: Mona Hazzah, VPD

SUBJECT: Research Projects Status Reports

I would appreciate it if you could have the attached Status Report Forms completed and sent to my office (F1233) not later than Wednesday, January 14, 1976. The information provided in the forms should be current as of December 31, 1975. Listed below are the project numbers, and the name of the responsible staff member, for which Status Reports are required.

I am attaching copies of the November External Research Computer Printout where necessary.

| | |
|---|---|
| 670-44 | J-P. Jallade |
| 670-78 | M. Hultin |

Attachments

Rejected projects

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

# OFFICE MEMORANDUM

TO: Mr. B. B. King

DATE: December 16, 1975

FROM: Vinod Dubey

SUBJECT: Research Proposal by Nabil Khaldi

1. I apologise for the delay in responding. The paper had been sent on to the Program Divisions for reactions.

2. After discussion with the two divisions dealing with the fertile Crescent (CPDIA and CPDIIC), I conclude that there is little interest in the proposal. My own reaction also is somewhat skeptical given the present form of the proposal. At the same time studies of the agricultural sector in the Crescent countries should be of interest to the Region.

DEC 18 REC'D

IONA COLLEGE
NEW ROCHELLE, N.Y. 10801

SCHOOL OF BUSINESS ADMINISTRATION

TELEPHONE
(914) 636-4216
Home Tel: 914- 632-1210

December 11, 1975

Dr. Benjamin King,
Research Advisor, International Bank for Reconstruction and Development
Washington, D.C. 20433

Dear Dr. King,

See Res General Documents

Dr. James Blackman of the National Science Foundation suggested that I write you for consideration of my proposal "Agricultural Research and Productivity in the Fertile Crescent and Egypt". Dr. Blackman has forwarded a copy of my proposal to you, but I am including an additional copy for your convenience. Also included is my preliminary statistical appendix for data collected on Syria, as a part of a recent project funded by the National Science Foundation.

I have taken the liberty of also including a copy of my article "Education and Allocative Efficiency in U.S. Agriculture", which is currently in the November issue of the American Journal of Agricultural Economics.

I will be attending the meeting of the Allied Social Sciences Association in Dallas, December 26-31. Perhaps we could meet there if you are also planning to attend the convention. Otherwise, I could meet with you in Washington at your convenience. I will be in touch with you next week to discuss a preferable date.

Sincerely,

Nabil Khaldi

Nabil Khaldi

# Education and Allocative Efficiency in U.S. Agriculture

**Nabil Khaldi**

Rapid technological change creates production uncertainty with a consequent decline in allocative efficiency; productivity growth appears to augment the comparative advantage of large farms, which alongside rising operator education implies scale economies in the use of information. A method is provided for measuring cost inefficiency due to changes in input mix and failure to produce optimum output which is related to growth in farm size. Statistical results provide support for the hypothesis that education enhances allocative efficiency.

*Key words:* allocative efficiency, education, agricultural research, cost inefficiency, optimum output, information, scale economies.

The role of education in agricultural productivity has been examined in a number of studies. Education enters the aggregate production function as an explicit input with its estimated coefficient as the only source of productivity (Gisser, pp. 582–84; Griliches 1963, pp. 961–65; Griliches 1964, pp. 335–36; Kislev, pp. 61–68). In this sense, the marginal product of education captures the "worker effect" of education, reflecting the increases in output while holding physical resources constant.[1]

In a dynamic agriculture, however, research activities—both basic and applied—augment the stock of scientific knowledge and yield new and improved inputs. As producers face a less than perfect familiarity with the "new things," they at any point in time will be making production errors. Hence, productive research activities create and perpetuate disequilibrium in modern farming. Education may improve the decision-making process and thereby influence the level and/or the composition of other inputs. In this setting, an estimate of the worker effect of education, as reported in the productivity studies quoted above, represents an underestimation of the total effect of education in production.

Thus, in an economic environment where new inputs are appearing and relative prices are changing, the presence of disequilibrium yields excessive costs and creates an incentive for decision makers to learn and adjust their activities.[2] The extent to which education may enhance farmers' ability to respond to these new growth opportunities implies that, for this input, there does exist an allocative effect in agricultural production.[3]

In this study, allocative decisions are a particular set of activities devoted to reduction of *ex post* errors in the first-order conditions. These errors are then decomposed into both the minimization of input mix and the choice of the optimum output (scale effect).

The objective of this study is to identify the

Nabil Khaldi is an associate professor of economics at Iona College-New Rochelle.

This paper is based on the author's Ph.D. thesis, which was submitted to Southern Methodist University and was partially funded by the Institutional Development Grant No. 31-46-70-06 of the Manpower Administration, U.S. Department of Labor. The assistance that was received from the Department of Economics of Southern Methodist University during work on the dissertation, and especially from Thomas Johnson, is gratefully acknowledged. The author wishes to express his sincere appreciation to Finis Welch for the many valuable comments that permeate all aspects of this paper. The agricultural research data used in the study was provided by Robert Evenson and the author is also grateful to him for many helpful comments. William G. Tomek and anonymous reviewers made numerous suggestions and comments that led to improvements of all aspects of this paper.

[1] Worker effect of education is distinguished from allocative effect—a central part of this investigation—which reflects the managers' ability to acquire and decode information about productive characteristics and costs of other inputs and refers to covariation between education and other inputs.

[2] This contrasts the static traditional agriculture where farmers are dependent on factors which they are accustomed to and may also learn a particular efficient set of techniques passed on from one generation to the next. Agricultural production activities in this sense are in long-run equilibrium (complete adjustments) since nothing is, or has been, happening. These implications are found in the works of J. W. Mellor and T. W. Schultz (1964).

[3] In his analysis of the midwestern U.S. farmer's adjustment to the changing optimum quantity of nitrogen fertilizer in corn production, Huffman clearly demonstrates a dimension of allocative effect of education in a dynamic environment. Another dimension was stressed earlier by Nelson and Phelps' hypothesis that education enhances innovative ability as it speeds the process of technological diffusion.

errors and to show that in the presence of disequilibrium conditions, education contributes to allocative efficiency. Accordingly, links between allocative efficiency and operator education are examined in relation to these errors.

The first is error of cost inefficiency which measures the proportion by which observed cost exceeds minimum cost for given output. Changes in the inefficiency indexes, due to changes in input mix, are then linked to the allocative effect from education. To derive the inefficiency measure, a model has been developed where a production function for 1964 U.S. agriculture is estimated; from that function optimal input quantities are imputed and their implications are then analyzed.

The second error is in scale—the opportunity loss from failure to produce optimum level of output—and is closely related to adjustments in farm size. So long as the forces which result in scale economies provide incentives for farm size expansion, there is support for the comparative advantage of large farms. The perspective is that these forces may not only have enhanced the comparative advantage of large farms, but also in the context of dynamic agriculture they have created economies of scale in the use of information. Thus, as average schooling increases with farm size (schooling facilitates learning), there may be additional gain from education through the choice of optimum rate of output (i.e., profit maximization). Implications from these hypotheses are presented.

## The Production Function: Data and Estimation

A necessary step for computation of cost minimization level for material inputs requires the estimation of a production function. Assuming a Cobb-Douglas type of production function for 1964 U.S. agriculture, the relationship may be expressed as

$$(1) \qquad Y_j = A_0 \prod_{i=1}^{5} X_{ij}^{\beta_i} R_j^{\alpha_1} E_j^{\alpha_2},$$

where $Y$ is the expected output, $X_1, \ldots X_5$ are material inputs (land, machinery, labor, fertilizer, livestock, and miscellaneous). $R$ and $E$ are research and education inputs respectively with $\beta_i$'s, $\alpha_1$ and $\alpha_2$ as the corresponding elasticities of production; $A_0$ is a constant.

The dependent variable $Y_j$ is gross agricultural output in dollars for the average farm in state $J$ and measured in 1964 prices. Total value of output is built up from farm products sold, home consumption, net changes in inventories, and government payments which are deflated separately by an appropriate U.S. price index.

All factors of production are also on a per farm basis. Inputs in value terms, which are measured in 1964 state prices, are adjusted cross sectionally by appropriate U.S. price indexes. Acres per farm is used to measure land area in the production function.[4]

The machinery variable input is a measure of the estimated services from selected farm machinery plus expenditure on fuel, custom hire, and contract work of machine services. The imputed services are estimated to be 17% of the stock value of machinery, which corresponds to a 10% interest cost of capital plus 7% annual depreciation. The 17% is assumed to be constant over state and between the stock value and the flow of the services.[5]

The labor variable measured in physical flow units is defined as the annual days of employment. The input which is computed the same as that reported by Griliches includes operators' labor and family and hired labor (1964, p. 974). The physical labor is adjusted for operators over 65 years at 0.6 and for labor supplied by other family members at 0.65. No attempt is made, however, to adjust for quality differences.

Actual physical quantities of fertilizer which include dry and liquid material are evaluated by state prices to account for the input expenditure.

The livestock and miscellaneous variable is the sum of the imputed services of the livestock value (10% of the capital) in addition to expenditures on seed and feed for livestock and poultry. Livestock capital which includes milk cows, other cattle, hogs, pigs, sheep, lambs, and chickens are evaluated at per head state prices. The seed component also includes expenses on bulbs, plants, and trees.

Education input denotes the human capital generated in the schooling process for farm operators. The measure is based on years of school completed by farm operators weighted

[4] Acres per farm measure involves errors since it ignores diversity of land fertility and soil quality. However, an alternative measure for this input in value terms can also be biased due to the site value of land.

[5] The 1959 regional prices for selected machinery, as reported by Kislev, were adjusted to compute the 1964 stock value of the capital.

Table 1. Agricultural Production Function for the United States, 1964

| | Regression Results | | | |
|---|---|---|---|---|
| | 1 | | 2 | |
| Variable | Coefficient | Standard Errors | Coefficient | Standard Errors |
| $X_1$ Land | 0.110 | 0.023 | 0.095 | 0.023 |
| $X_2$ Machinery | 0.153 | 0.052 | 0.225 | 0.059 |
| $X_3$ Labor | 0.503 | 0.080 | 0.399 | 0.094 |
| $X_4$ Fertilizer | 0.168 | 0.021 | 0.171 | 0.020 |
| $X_5$ Livestock, etc. | 0.319 | 0.037 | 0.272 | 0.039 |
| $R$ Research | | | 0.054 | 0.026 |
| $E$ Education | | | 14.194 | 7.813 |
| Intercept | 1.241 | | 1.486 | |
| $R^2$ | 0.968 | | 0.979 | |
| $\beta_i$ | 1.253 | | 1.162 | |
| $D_f$ Degrees of freedom | 33 | | 31 | |

Source: All data for variable inputs are obtained from the U.S. Dep. of Commerce (1966) unless otherwise specified in the text.

by national income for the respective schooling class data (U.S. Dep. of Commerce 1963).

Research input defines a process by which flows of services provided by capital (human and nonhuman) are transformed into other types of capital such as improved machinery, seed and fertilizers, production, and managerial ability. The imputed services of this input is assumed to approximate the opportunity cost, which in turn in production is assumed to be equal to public expenditure on research.[6]

Regression results from ordinary least squares estimates of the log linear production functions are reported in table 1.[7] All variables for both equations in the table are defined in value terms except land and labor, which are reported in physical units.[8] The results exclude education and research from the list of inputs in one of the estimated equations.

The $t$-ratios for material inputs in both equations are relatively large. Those of education and research are somewhat smaller but still near 2.[9] The $R^2$ for the second regression equation in table 1 shows that the inputs account for 98% of the variation in aggregate U.S. agricultural output across states. The increase in $R^2$ for this equation along with the estimated coefficients clearly support the hypothesis that both education and research belong in the production function.[10]

None of the regression results are very surprising in light of a priori expectation or other comparable aggregate production estimations. The ratio of marginal revenue product to marginal cost is about 1 for labor (1.09). It is less than 1 for land (0.725) and greater than 1 for machinery (1.20) with livestock plus miscellaneous at 1.45 and fertilizer at 1.88. The implication of the regression results is that for the year 1964, modern inputs such as capital machinery and fertilizer are still underutilized.

## Inefficiency Indexes: Measurement and Regression Results

Statistical estimates of production coefficients are basically a means for solving the cost

[6] Following Evenson, the total research expenditures are estimated for each of nine years ending in 1959 and are averaged using inverted "V" weights over the period. Average annual research is then divided by the number of farms in the state.

[7] Simultaneous equation bias is assumed away since input decisions, with the exception of harvesting cost, largely refer to anticipated rather than realized output. In an alternative specification, Griliches found little difference between ordinary least squares and instrumental variable estimators when instruments were introduced for the labor input (1964, p. 965).

[8] Estimation bias that occurs from the use of value rather than quantity data in cross-section study would be minimum as long as relative price differences are mainly limited to transportation costs, the exceptions being land and labor inputs. In the case of labor, one encounters large variations in the price per unit, while a value measure of land includes errors due to "pure site rent." However, alternative estimation of production where labor and land are specified in value terms has not greatly altered the statistical results reported in table 1.

[9] It should be pointed out that pervasiveness of research activity, particularly in cross-section estimation, may diminish the effect of state research on output and results in a downward bias for its coefficient. Also, according to Evenson, exclusion of expenditures on private research activity results in a substantial downward bias although a portion of this excluded effect may be partially captured in the input-price measure.

[10] In a gross revenue production formulation, the implied marginal product of education includes, in addition to Welch's worker effect, the allocative effect within the material input bundles (1970). This is related to the managers' ability to move gross revenue closer to the optimum level. Both the worker effect and this part of Welch's allocative effect are essentially those reported on the contribution of education from fitting 1949, 1954, and/or 1959 agricultural data to aggregate production.

minimization model since they are used to derive measures of cost inefficiency. According to standard theory, the minimum cost of producing output given the production function and the factor prices for a competitive firm may be stated as

$$(2)\quad \frac{\beta_1 Y_j}{P_{1j}X^*_{1j}} = \frac{\beta_2 Y_j}{P_{2j}X^*_{2j}} = \frac{\beta_3 Y_j}{P_{3j}X^*_{3j}} = \frac{\beta_4 Y_j}{P_{4j}X^*_{4j}} = \frac{\beta_5 Y_j}{P_{5j}X^*_{5j}}$$

where $j = 1, \ldots 39$ are observations of production in states. The asterisk designates the optimum level of factor input with $\beta_i$ and $P_i$, respectively, as the production coefficient and the price for each of the respective inputs.

For convenience, equation (2) may be written in the form

$$(3)\quad X^*_{kj} = \frac{\beta_k P_{1j}}{\beta_1 P_{kj}} X^*_{1j} \qquad k = 2,3,4,5.$$

When substituting equation (3), the estimated U.S. production equation for 1964 becomes

$$(4)\quad Y_j = A_0 R_j^{\alpha_1} E_j^{\alpha_2} X^*_{1j}{}^{\beta_1}\left(\frac{\beta_2 P_{1j}}{\beta_1 P_{2j}} X^*_{1j}\right)^{\beta_2} \left(\frac{\beta_3 P_{1j}}{\beta_1 P_{3j}} X^*_{1j}\right)^{\beta_3} - - - \left(\frac{\beta_5 P_{1j}}{\beta_1 P_{5j}} X^*_{1j}\right)^{\beta_5}.$$

To derive the solution for each factor input, equation (4) may be expressed as

$$(5)\quad X^*_{1j} = \left(\frac{Y_j \prod_{i=1}^{5}\left(\frac{\beta_1 P_{ij}}{\beta_i P_{1j}}\right)^{\beta_i}}{A_0 R_j^{\alpha_1} E_j^{\alpha_2}}\right)^{\frac{1}{\sum_{i=1}^{5}\beta_i}}$$

This provides the solution for the cost minimization level of $X^*_{1j}$ (the base input land) in terms of the value of output, a constant, and the coefficients of the estimated production equation reported in table 1.

Let $C^*_j$ and $C_j$ denote the optimum value of material input aggregates, and let the actual cost of the variable inputs selected be respectively expressed as

$$(6)\quad C^*_j = \sum_{i=1}^{5} \frac{\beta_i P_{1j}}{\beta_1 P_{ij}} X^*_{1j}$$

and

$$(7)\quad C_j = \sum_{i=1}^{5} P_{ij} X_{ij}.$$

Then this proportion where observed costs exceed the minimum costs for observed output $\left(\frac{C_j}{C^*_j} - 1\right)$ may simply denote an index of cost inefficiency due to cost minimization error in input mix.

As a basis for evaluation of the degree of efficiency in production, the model provides an alternative to the profit maximization problem (Hopper, p. 611; Massell, p. 496). It focuses instead on the cost minimization problem which conveniently allows for examination of several hypotheses related to the effect of education on allocative efficiency of farm operators. Thus, when the standard assumption of perfect and costless information is relaxed and production occurs in a dynamic economic setting where new technology is being generated, the standard first-order conditions for cost minimization may not be fulfilled. Here, a factor can contribute to production by reducing the size of the errors.

The hypothesis is that farm operators who are more efficient at acquiring and processing information will, on balance, be more successful at minimizing cost. Hence, as public research activities perform both basic and applied research, they create disequilibrium in modern farming. This disequilibrium yields excessive costs (losses in profits) and produces incentives for decision makers to learn and adjust their activities. If education enhances the managerial ability of the operator, its productivity becomes a vital source to the decision-making process in agricultural production.

Table 2 reports the regression results of the influence of education on managerial ability. The dependent variable in each equation is a measure of the squared percentage discrepancy between observed cost and estimated optimum input level where the estimated optimum refers to the value at the imputed cost minimum. Only in equation (3) will the dependent variable denote the inefficiency measure of all material inputs. The dependent variable for each of the equations (4–8), measures cost inefficiency of land, machinery, labor, fertilizer, livestock, and miscellaneous respectively. All indexes are explained by operator education and agricultural research expenditure in the state.

In equation (3) the coefficient on education has a negative sign and a small standard error, while that of research expenditure has the expected sign with $t$-value slightly greater than one. Regression results of equation (3) confirm the hypothesis that inefficiency indexes for aggregate material inputs are inversely related

**Table 2. Factors Affecting $\left(\frac{C_j}{C^*_j} - 1\right)^2$ for Aggregate Material Inputs and for Each Individual Input for U.S. Agriculture, 1964**

| Regression Number | | Education | Research | Intercept | $R^2$ | $D_f$ |
|---|---|---|---|---|---|---|
| 3 | Aggregate | −1.231 | 0.0005 | 0.133 | 0.105 | 36 |
| | | (0.590) | (0.0003) | | | |
| 4 | Land | 19.084 | 0.003 | −0.653 | 0.250 | 36 |
| | | (9.237) | (0.006) | | | |
| 5 | Machinery | −2.127 | 0.0003 | 0.299 | 0.040 | 36 |
| | | (1.993) | (0.0013) | | | |
| 6 | Labor | −13.442 | 0.002 | 1.825 | 0.107 | 36 |
| | | (7.773) | (0.005) | | | |
| 7 | Fertilizer | −1.058 | 0.00001 | 0.586 | 0.035 | 36 |
| | | (1.273) | (0.0008) | | | |
| 8 | Livestock, etc. | −0.795 | 0.0002 | 0.127 | 0.067 | 36 |
| | | (0.499) | (0.0003) | | | |

Note: Standard errors of coefficients are in parentheses.

to operator education. The results indicate weak support for the effect of state research activity.[11] Also, regression results for each of the material input equations (4–8), except for land,[12] confirm those concluded for the aggregated inefficiency index, particularly the effect of education on allocative efficiency.

## Scale Economies: Evidence and Implications of Results

The dichotomy of the role of education includes, in addition to cost minimization, the opportunity loss incurred from not maximizing profits. This may result from failure to produce optimum level of output, which is related in this study to scale adjustment in farm size.

Nearly all estimates of aggregate production functions for U.S. agriculture, including the production estimates in table 1, demonstrate statistically significant returns to scale. Indirect evidence pointing to rapidly expanding average size seems to indicate that a continual readjustment, due to the increasing returns to scale, is occurring.[13] Major developments along the usual trend toward increasing farm size can be noted in table 3. During the period between 1959 and 1964, the number of commercial farms declined by more than 13%, while the average growth in receipts rose by nearly 35%.

If scale economies provide incentives for farm size expansion, forces that result in increasing returns to scale must support the comparative advantage of large farms. Many of the economic benefits—particularly gains in capital productivity—favor large farms since they are more capital-intensive in contrast to small farms. Technical advances have also resulted in cost reduction for additional output, thereby increasing the most profitable level of output for the farm (Schultz 1967, pp. 53–70).

As reported in table 4, the use of fertilizer by commercial farms has more than doubled during the period between 1959 and 1964. This increase along the reported price decline of fertilizer (and expansion of agricultural output) makes large farms, which heavily depend on it,

**Table 3. Scale Change in U.S. Agriculture, All Commercial Farms**

| | 1959 | | 1964 |
|---|---|---|---|
| Number of farms (millions) | 3.7 | | 3.2 |
| Gross receipts per farm (1957–59$)[a] | $10,220 | | $13,780 |
| Decline in number of farms (%) | | 13.3 | |
| Average growth in receipts per farm (%) | | 34.4 | |

Sources: Madden (table 2); U.S. Dep. of Commerce (1961, 1966).
[a] The price deflator is the USDA index of prices received by farmers.

[11] In this study, since the intent is to measure the impact of education on managerial ability, effective education is approximated by the proportion of farm operators who have attended college.

[12] Inconsistent statistical results for the land input should not be surprising, since land input involves large measurement errors. Also, a large portion of the input is fixed, obscuring the influence of the variability of education, or research, or both.

[13] In accounting for growth in measured agricultural activity from 1940 to 1960, Griliches attributes more than one-half of the total gain to growth in size alongside scale economies (1963).

**Table 4. Selected Expenses, Unit Cost, Efficiency by Farm Class in United States**

| | | Economic Class of Commercial Farms | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Date | All Commercial | I (large) | II | III | IV | V | VI (small) |
| Input per output | 1960 | | 0.91 | 0.95 | 1.10 | 1.34 | 1.69 | 2.67 |
| (unit cost, $) | 1965 | | 0.87 | 0.89 | 1.09 | 1.38 | 1.87 | 3.28 |
| Output per input | 1960 | | 1.10 | 1.05 | 0.91 | 0.74 | 0.59 | 0.37 |
| (efficiency, $) | 1965 | | 1.15 | 1.12 | 0.91 | 0.72 | 0.53 | 0.30 |
| Percentage share | 1960 | | 24.80 | 15.50 | 20.60 | 16.50 | 10.00 | 3.50 |
| of all inputs | 1965 | | 33.50 | 19.10 | 18.60 | 11.30 | 6.20 | 3.90 |
| Percentage share of | 1959 | 93.40 | | | | | | |
| selected inputs ($)[a] | 1964 | 94.70 | | | | | | |
| Fertilizer consumption | 1959 | 1.63 | | | | | | |
| (tons) | 1964 | 3.01 | | | | | | |

Sources: Tweeten (table 1), Madden (table 2.3), U.S. Dep. of Commerce (1961, 1966).
[a] Includes feed, livestock, seed, fertilizer, petroleum products, machine hire, and hired labor.

realize the greatest cost savings (Schultz 1967, pp. 53–70).[14]

The size-efficiency relationships favoring large farms are further reflected in the dollar efficiency and unit cost across the six economic classes. As noted in table 4, the unit cost is nearly three times smaller for 1960 and four times smaller for 1965 in class I than in class VI (small farms). In addition, the dollar efficiency is three times larger for 1960 and nearly four times larger for 1965 in class I than in class VI (for the same comparative classes). Thus, this evidence suggests that price and technical changes have enhanced the comparative advantage of large farms.

Furthermore, as rapid technological changes alter efficiency of agricultural production, they create uncertainty regarding the productive characteristics of the "new things." At a point in time, if measured production costs exclude the cost of acquiring information, a measure of scale effect would be directly related to the flow of the "new things" that render information a valuable input. To the extent that a productive research activity provides new and better inputs and techniques, it contributes to the existence of disequilibrium conditions in modern agriculture. The resulting uncertainty, as well as the anticipation of its occurrence and the need for appropriate responses, create an incentive (demand) for information. As information denotes a decision process in production, the productivity of education (education presumably facilitates learning) becomes a vital source of the decision-making process.

Thus, under technically dynamic conditions, the hypothesis is that growth advantages have been accruing to large farms, which alongside rising operator education, implies scale economies in the use of information (Welch 1975, pp. 19–22). This added dimension of the effect of education on allocative efficiency in an uncertain environment, is considered via the role of agricultural research. The idea is roughly that the higher the research activity within a state, the more rapid the pace of technological change and, on balance, the greater are the opportunities for using allocative skills.

In this context, optimum outputs which are tied to scale economies in the use of information are accruing to farms whose operators have higher levels of education.[15] Several tests of the implications of information hypothesis are reported in table 5. As pointed out, information refers to the decision process, so that return to education can be viewed as a return to the decision maker.

The main test of the basic information hypothesis is reported in column 1 (table 5). The estimated scale coefficient—the logarithmic ratio of revenue to observed cost—is explained by operator education and the state research activity. As expected, both inputs are directly related to the dependent variable, and their coefficients have small standard errors.

The regression results imply scale economies in the use of information, where education facilitates learning and where research

[14] Estimates provided by Welch on the expenditure share of fertilizer in 1959 indicate that for class I farm (large size), fertilizer share increased by 44% relative to average commercial farms, while class VI farm showed a decline of over 40% relative to that average (1975).

[15] Welch reports that "average" schooling for 1964 farm operator increases with farm size (1975).

Table 5. Influence of Education and Research on the Scale Coefficient (col. 1), on Farm Size (col. 2), and on Output Growth per Farm (col. 3) in the United States, 1964

| Variable | Regression Results 1 | 2 | 3 |
|---|---|---|---|
| Education | 0.719 | 4.036 | 17.609 |
| | (0.294) | (1.216) | (10.342) |
| Research | 0.095 | 0.163 | — |
| | (0.040) | (0.171) | |
| Intercept | −0.395 | 6.242 | 0.283 |
| $R^2$ | 0.325 | 0.290 | 0.072 |
| $D_f$ | 36 | 36 | 37 |

Note: All variables are in logarithmic forms of their original values. Standard errors of coefficients are in parentheses.

activity provides new and better inputs and techniques. The direct relations of both inputs to the scale coefficient strongly suggest that return to education and state research activity are increasing functions of farm size.[16]

Further evidence of adjustments in farm-size efficiency relationship is indicated by column 2 (table 5) where acres per farm are regressed on education and research activity. Both inputs have the logical sign, but only the coefficient of education has a small standard error.

Finally, to provide a support for the allocative efficiency of education over time, the logarithm of the proportionate increase in output between 1959 and 1964 is explained by operator education, column 3 (table 5). The coefficient of education has the expected sign and the $t$-ratio is 1.70.

## Concluding Remarks

A model developed in this paper provides estimates of errors in production which are related to errors in cost-minimizing input combinations and errors in the expansion of output to the optimal level. These errors are treated as indexes of allocative inefficiency and are then explained by the effect of allocative efficiency of operator education.

The statistical results provide strong support for the basic hypothesis that education enhances allocative efficiency and weak support for the hypothesis that the pace of technological change and marginal efficiency are inversely related. The evidence presented suggests that price and technical changes have enhanced the comparative advantage of large farms and that in a technically dynamic environment, there have been scale economies in the use of information. The partial effect of education and research activity is an important determinant of the scale bias.

The actual resource wastage implied by the estimates of this study (almost 10%) suggests that the importance of allocative efficiency and the scope for resource adjustment would make a relevant guideline for public policy.

Since explanation of the allocative phenomenon relies heavily on the relationship between technical change and the value of information, a large share of the returns to education are tied up with these processes and the resulting chain of economic adjustments. As economic growth becomes increasingly dependent on technical change, it becomes imperative that in the quest for optimal combination of resources and their level, emphasis should be placed on factors complementary to learning, since they are a function of the rate of technical change.

[*Received March 1975; revision accepted July 1975.*]

[16] Analysis by Evenson, based on thirty-nine state experiment stations in the United States, indicates that the marginal returns per research dollar were generally higher in stations with more scientists, more graduate students, higher staff salaries, and higher levels of staff training.

## References

Evenson, R. "Economic Aspects of the Organization of Agricultural Research." *Resource Allocation in Agricultural Research*, ed. Walter L. Fishel, pp. 163–82. Minneapolis: University of Minnesota Press, 1971.

Gisser, M. "Schooling and the Farm Problem." *Econometrica* 33 (1965):582–92.

Griliches, Z. "Research Expenditures, Education and the Aggregate Agricultural Production Function." *Amer. Econ. Rev.* 54 (1964):961–74.

———. "The Source of Measured Productivity Growth in U.S. Agriculture, 1940–1960." *J. Polit. Econ.* 71 (1963):331–46.

Hopper, W. D. "Allocation Efficiency in a Traditional Indian Agriculture." *J. Farm Econ.* 47 (1965): 611–24.

Huffman, Wallace E. "Decision Making: The Role of Education." *Amer. J. Agr. Econ.* 56 (1974):85–97.

Kislev, Y. "Estimating a Production Function from 1959 United States Census of Agricultural Data." Ph.D. thesis, University of Chicago, 1965.

Madden, Patrick J. "Income, Wealth, and Opportunities of the Farm Population." *Benefits and Burdens of Rural Development*, ed. E. O. Heady, pp. 17–40. Ames: Iowa State University Press, 1970.

Massell, B. F. "Elimination of Management Bias from Production Functions Fitted to Cross-Section Data: A Model and an Application to African Agriculture." *Econometrica* 34 (1967):495–508.

Mellor, J. W. *The Economics of Agricultural Development*. Ithaca: Cornell University Press, 1966.

Nelson, R. R., and E. S. Phelps. "Investment in Humans, Technological Diffusion and Economic Growth." *Amer. Econ. Rev.* 56 (1966):69–75.

Schultz, T. W. "National Employment Skills and Earnings of Farm Labor." *Farm Labor in the United States*, ed. C. E. Bishop, pp. 52–70. New York: Columbia University Press, 1967.

———. *Transforming Traditional Agriculture*. New Haven: Yale University Press, 1964.

Tweeten, L. G. "Theories Explaining the Persistence of Low Resources Returns in a Growing Farm Economy." *Amer. J. Agr. Econ.* 51 (1969):769–817.

U.S. Department of Commerce, Bureau of the Census. *1959 Census of Agriculture*. Washington, 1961.

———. *1964 Census of Agriculture*. Washington, 1966.

———. *1960 Census of Population Subject Reports—Educational Attainment*. (PC)(2)5B. Washington, 1963.

Welch, Finis. "Education in Production." *J. Polit. Econ.* 78 (1970):35–59.

———. "Returns to Scale in U.S. Agriculture." *Education, Information, and Efficiency*. Unpublished working paper, Series 1. Center for Economic Analysis of Human Behavior and Social Institutions, National Bureau of Economic Research, Palo Alto, 1975.

Rot. General - Documents
W/L/d. Dec 11, 75

# AGRICULTURAL RESEARCH AND PRODUCTIVITY IN THE FERTILE CRESCENT AND EGYPT

A Research Proposal

by

Nabil Khaldi

Most studies of productivity growth in agriculture which point to a strong functional relationship between research and agricultural productivity have concentrated heavily on developed countries.[1]

A great number of agricultural productivity studies have failed to provide productivity indexes that take account of real productivity change - a shift in production function - due to change in factor proportions over time. This study will utilize a total factor - productivity measure as an indicator of real change in productivity. This measure implies an index of output per unit of total input, where the indexes of inputs and outputs are weighted by variable factor and output shares to reflect production function shifts. Total input growth rate is disaggregated into the contribution of traditional inputs; land, labor, and animal power, and of modern inputs; fertilizer, tractor and pumpset irrigation. The productivity growth rate is a residual - the difference between the growth rate in output and the growth rate in inputs.

In addition, recent studies by Griliches ( 3 ), Griliches and Jorgenson ( 4 ), and Denison ( 1 ) have shown that the typical measured productivity series contains systematic errors

---

[1] Most notable exception is Robert Evenson's work on India, where evidence provided implies that knowledge created by research is associated with the use of modern inputs and is therefore more effective in terms of yields in the districts where the use of these inputs is encountered ( 2 ).

which for the most part can be identified with factor qualities.

In light of these findings, productivity growth may be explained, if data are available to actually measure changes in various types of factor qualities, as in the case of labor skill which will result in a component of measured productivity change. However, a full explanation of productivity change would be impossible to attain for the countries covered in this study, since this requires obtaining data in sufficient detail to account for productivity changes that are identified with factor qualities. Alternatively, productivity components due to factor qualities, will be systematically related to agricultural research and extension activity. Accordingly, models for estimating the contribution of research and extension activities for the mentioned countries will be developed.

Scope and Nature of the Data

Time series data on agricultural output and inputs for the countries covered in this study will be used in the construction of the total productivity measure. Observations will be province and regional aggregates for the period 1950-1975. Further, the study will be utilizing a time series data on investment in research and extension activities, in addition to schooling attainment of farm population, as the main determinants of productivity changes in agriculture.

At present, a complete compilation of output and inputs data (province level) for each of the countries studied is not available.[2]

---

[2] I am including preliminary notes regarding output and input data on Syria, which was part of a research project funded by the N.S.F.

Concluding Remarks

The identification of sources of growth in agriculture, as well as the causes which bring about the actual productivity differentials between different regions, continues to be one of the bottlenecks in agricultural development for less developed countries.

In the Middle East, as in most regions of the world, except for the oil-rich countries, agriculture has been and will continue to be the mainstay of economic life. In each of the countries examined in the proposed study, no less than 50 percent of the total population depends on agriculture for their livelihood , and a substantial portion of the population are engaged in the processing and handling of agricultural products. Thus, it would hardly be possible to achieve sustainable economic progress apart from gains in agricultural productivity. It is hoped that the proposed study will provide a meaningful addition to the prospects for furthering our understanding of the factors determining the efficiency with which scarce resources are utilized to produce food.

## REFERENCES


1. Denison, E.F., "The Sources of Economic Growth in the United States and the Alternative Before Us", Committee for Economic Development, Washington, D.C. 1962.
2. Evenson, Robert E. and Yoav Kislev, Agricultural Research And Productivity Economic Growth Center, Yale University, Yale University Press, 1975.
3. Griliches, Zvi, "The Sources of Measured Productivity Growth, U.S. Agriculture, 1940-1960," Journal of Political Economy , Vol.LXXI, No.4, August, 1963, pp.331-346.
4. Grilizhes, Zvi and D.W. Jorgenson, "The Explanation of Productivity Change" Review of Economics and Statistics, Vol.XXXIV, No.99, 1952.

(Preliminary Report)

SYRIAN ARAB REPUBLIC

Statistical Appendix

Notes on calculations of data processes for output, inputs, and factor shares by Syrian province , 1950-1974.

A. At present, Syria is divided into the following Muhafazats (the Arabic equivalent of districts or provinces).

1). Damascus - also includes Damascus City, which administratively constitutes a separate Municipality (In this study, Damascus includes both of these administrative divisions).

2). Aleppo
3). Homs
4). Hama
5). Latakia
6). Deir-ez-Zor
* 7). Idleb
8). Hasakeh
* 9). Al-Rikka
10). Sweida
11.) Dara
* 12.) Tartous
* 13). Quneitra

* Note - Idleb and Al-Rikka became provinces at the beginning of the 1960's, while Quneitra and Tartous became provinces around the middle and the latter part of the 1960's. respectively.

Also, Syria is divided into the following regions:

1 ). The Coastal Region which includes the provinces of Latakia and Tartous.

2 ). The Southern Region which includes Damascus, Sweida, Dara and Quneitra provinces.

3 ). The Northwest Region which includes Aleppo and Idleb provinces.

4 ). The Central Region which includes Homs and Hama provinces.

5 ). The East Region which includes Hasakeh, Al-Rikka, and Deir-ez-Zor provinces.

6 ). The individual provinces: Homs, Hama, Damascus, Sweida, Dara Quinetra, Hasakeh, Deir-ez-Zor, Al-Rikka, Aleppo, Idleb, Tartous and Latakia.

## I. Agricultural Production

The output data are taken from the Statistical Abstract of Syria 1950-1974. The output includes the following thirty eight main crops, plus animal products for the thirteen provinces of Syria.

### A. Crops

| Cereal | Dry Legumes | Vegetables | Industrial Crops |
|---|---|---|---|
| Wheat | Chick Peas | Garlic | Sesame |
| Barley | Lentils | Onions | Cotton |
| Maize | Haricot Beans | Tomatoes | Tobacco |
| Rice | Broad Beans | | Sugar Cane |
| Oats | Rambling Vetch | | Sugar Beet |
| Millet | Flowering Sern | | Hemp |
| | Bitter Vetch | | |
| | Peas | | |
| | Bitter Vetch | | |

| Fruit | Fruit con't |
|---|---|
| Quince | Plums |
| Pistachio | Nut |
| Olives | Pomogranetes |
| Grapes | Figs |
| Apricots | Almonds |
| Apples | Cherries |
| Pears | |
| Peaches | |

### B. Animal Products and Meat

Cheese
Butter
Wool
Hair
Milk
Eggs
Ghee Samneh (Clarified - Butter)
Sheep
Goats
Cows
Camels and Buffalo

### Output Data on Crops

Output data by province for the years 1950, 1951 and 1952 were computed on the basis of 1953-1955 average share for the respective province.

Data on Rambling Vetch per province were linearly extrapolated over the period 1956-1961 for this one crop.

B. Animal Products- data by province are reported in the Statistical Abstract for the period 1956-1974.

1. Tonnage of wool, hair, cheese, butter, ghee samneh (clarified butter), milk , and eggs for 1950-1955 were computed by using the country totals for the years 1950-1955 and each of the province shares for 1956-1958.

2. Wool tonnage by province for the period 1950-1955 was estimated on the basis of the sheep population in each province. According to official sources, 1.25 kilograms of wool are produced per head per year. Similar procedure was used to calculate hair production, where an estimate of a 1.5 kilogram per head per year is reported by the same sources.

3. On the basis of the Ministry of Planning sources (arabic), the number of milk producing cows is estimated to be 59% of the total cow population. Total tonnage of milk in Syria provided by the same sources for the years 1950 to 1955 was used to determine the final production by province for this period.

4. Egg figures for 1950 to 1955 were based on the official Syrian source. An estimate of 50% of all chickens lay 130 eggs annually.

5. Output category of slaughtered animals is reported in the Statistical Abstract 1950-1974 . Total slaughtered sheep, goats, cows, camels, buffalo were assumed to be 1.6 of the figures reported by the slaughter houses. Adjustments were made for the whole period except the 1970 figures which were computed using the 1969 and 1971 averages. Figures for slaughtered sheep, goats, and cows include all slaughtered lambs, kids, and calves respectively for 1950 -1973.

II. Output Prices

A. The 1963 wholesale crop prices for the country were obtained from the Syrian Ministry of Planning. (Arabic) The annual crop prices were derived for the period 1950-1973 through wholesale price index.

B. The 1963 animal product wholesale prices are obtained from the Ministry of Planning. (Arabic) The prices are adjusted through wholesale price index.

C. Livestock prices are used for the respective categories of slaughtered animals.

III. Input Quantity Indexes

A. Livestock - Input quantities for livestock were provided by the annual Statistical Abstract 1950-1974. Cow figures were complete for the period. Sheep and goats were not available from 1966 to 1970.

Chicken figures for 1956-1973 were available by province in the Statistical Abstract. Computations for 1950 to 1955 were linearly interpolated by using the 1956 distribution by province and the total Syrian Figures.

Data were not available for calf quantities per province before 1963. Based on total Syrian data received from government sources, the relationship between calves are estimated to be 30% of total number of cows. Cow quantities per province used by the Statistical Abstract were used to compute the figures for calves from 1950 to 1974.

B. Bullock Labor

Work animals were considered to be horses, mules, camels, oxen, buffalo and asses. Figures were complete for horses, mules, asses and oxen per province. From 1966 to 1970, figures for camels and buffalo were not available. For the period 1966 to 1969, figures for camels and buffalo were linearly interpolated, using information from the 1964, 1965, 1970 and 1971 Statistical Abstracts.

C. Livestock Prices

The 1963 price for livestock was taken from the Ministry of Planning (Arabic) 1963. Information on price changes was taken from the Syrian Export Series, (various issues) and was used to back date and update prices for sheep, goats, cows, and chickens.

Changes in cow prices are used to adjust buffalo, oxen, horses, mules, asses and camel prices for the missing years. Calf prices are considered to be 35% of cow prices according to official sources.

D. Machinery

Machinery in use per province is given for 1970, 1972, and 1973 from the Ministry of Planning and from the Statistical Abstract. Totals for tractors were obtained from Statistical Abstracts and Ministry of Planning (Arabic). Total combines for 1950, 1951, and 1952 were calculated from figures from the Statistical Abstracts. From 1961 to 1965, totals for the country were reported in the F.A.O. Production Books. Water pump totals were reported in Statistical Abstracts 1961-1973. The 1950 to 1960 totals were calculated on the basis of official information.

The 1970, 1971, and 1973 distribution by province for the various categories of capital machinery were used to extrapolate for the rest of the period covered in the study.

E. Machinery Prices

The summary of monthly foreign trade, 1963, was used for the base price of machinery figures for the various machinery categories. Information on U.S.price changes , along with information from the F.A.O. Production Yearbook, were used to derive the various categories of machinery prices for the years 1953, 1958, 1965, and 1970.

F. Land

Land figures were divided into irrigated and non-irrigated land per province, reported in the Statistical Abstract, 1950-1974. Land rent was not available. Rent from expropriated lands was collected, but was found to greatly under-estimate the land share. Alternatively, and consistent with official estimates, value of rent was taken to be 25% of total crop value per year per province.

G. Seed

Quantities of seed by province for the period 1950-1973, was computed on the basis of the Ministry of Planning estimates of seed rate for 10 main crops.

H. Fertilizer

Total quantities of nitrogen and phosphate consumed by farmers for 1950-1973 were only available for the country as a whole. The fertilizer rate per crop for Egypt was used to compute fertilizer quantities by province. The rate was taken from the Agricultural Potential of the Middle East . Land area figures for main crops were taken from Statistical Abstracts.

The 1963 fertilizer price was also taken from the Agricultural Potential of the Middle East. Price changes from F.A.O. Production Yearbook and from official Syrian Sources were used to adjust fertilizer prices over the period.

I. Labor Employed in Agriculture

Agricultural labor figures were not available per province or per year for Syria. Information on population by province and on the number of economically active population (employed and unemployed) for Syria, were obtained from Statistical Abstracts and from

Population Censuses of Syria for 1960 and 1970 , as well as from the F.A.O. Demographs and Population Estimates , 1974.

The economically active population in agriculture was adjusted for unemployment, fishing and forestry. The unemployment figures were computed on the basis of a yearly unemployment rate reported in the 1960's and 1970's by the Ministry of Social Affairs and Labor. For the 1950's an estimate of unemployment of 6% was used. Total cost of fishing and the annual average wage were used to determine the number of fishermen.

Labor cost in forestry was calculated from information provided by the Ministry of Planning. Labor cost was set at 5% of the value of forest output for the 1950's, while 10% of the value was set for the 1960's. Forest area by province was reported in the Mediterranean Development Project, for Syria,F.A.O. 1959 . The forestry provinces include Latakia, Homs, Hama, Damascus, and Aleppo.

Research gen

Mr. Barney Rush (Development Economics) December 3, 1975

Alastair Stone (Transportation and Urban Projects)

Research Design: Dakar, Senegal

1. At your request, I have reviewed Rodney White's draft on research design, attached to his covering letter of November 8. In summary, the research design is progressing in the right direction, but at a rate which leaves much to be desired. I would have expected, at this stage, to have considerably more detail from Rodney regarding the "goals", and the data required to investigate those goals. I believe it is reasonable to expect that, for the conference in January, he should have a research design for our review, developed to the point where the actual bits of data, to be collected, have been identified against the goals, which would themselves be specified in some detail. For instance, the first goal, regarding the reaching of the target population, should by now be formulated in terms which identify that target population, in accordance with the various criteria used in their specification. By mapping out the data requirements for each goal so specified, he could then begin to identify common bits of information, which are required, and establish, according to his criteria, the relative importance of each. Against this ranking, he should then allocate the resources available to him, to determine which bits of data can be collected within that resource constraint. Such items, as the health survey, will require considerable effort to organize the laboratory and field sampling procedures and, until such specificity is achieved, these areas of experiment will not come clearly into perspective.

2. My second general point regarding the research design is that it currently provides a good basis for determining, on a go/no go basis, whether the project is a desirable method of intervention; however, the research design does not presently focus on the need to determine marginal effects of each project element. It is only in circumstances where different levels of treatment are available that such "marginal" analysis can be performed. However, the importance to the Bank of this marginal analysis for future intervention is such that the research design should, at least, seek such opportunity to investigate.

3. With regard to the coverage of relevant subject areas, I would like to see more attention paid, firstly to the institutional mechanisms, or organizational arrangements, used for the project implementation. I realize the potential political problems in such a research effort; however, handled deftly, such problems can be overcome, and the importance of this organization, on the success of the project, is such that we must focus on it in our research design. A second area for more comprehensive attention is the impact of the construction activity itself. In general, the research design focusses on the occupants of the sites, whereas the employment generation effects of the construction activity may go well beyond the site's inhabitants. When the total needs for shelter are programmed, we have before us, in most of our borrowing countries, an enormous construction program, which should be looked at as an industry in itself, which should be developed in a manner that permits the maximization of such objectives as employment, as well as economic efficiency. A further area, which has not as yet been specified, is the economic value of the self-help and mutual-help activities of the site occupants. The whole aspect of housing improvement is one which has been identified, but I would like to see that investigation alerted to the identification of the creation of specialized skills in construction as a means of raising the productivity of some members of the population.

cc: Mr. Venkateswaran, Mr. Lethbridge, Mrs. Tager

AStoneham

Research gen

Agricultural Income Survey in Botswana

(with financial support of IDA. DPS budget)

December 2, 1975

Mr. Derek Hudson,
Central Statistical Office,
P.O. Box 0024, 6AB,
Gaborone,
Botswana.

Dear Derek,

As promised, as soon as I came back to headquarters I spoke with colleagues about the status of your research project. Besides Timothy King's direct support to Dov Chernichovsky's work, wide and deep interest was expressed in the results of your enquiry. The Bank will be ready to comment upon and to use your findings, and I think that an official letter along these lines will reach you soon.

With respect to financing of the cost overruns, the Bank is taking a very sympathetic view of your problems. We are concerned that you should not cut into your work program, particularly as regards tabulations, in order to reduce costs. You can therefore be sure that the Bank will make a maximum effort to assist your undertaking. As a first step in particular, we would be ready to support any request to your Government for additional financing. We would appreciate it if you could inform us officially of the outcome of your discussions.

Sincerely yours,

Robert Maubouché
Senior Economist
Country Programs Department
Eastern Africa Regional Office

RMaubouché:lmm

cc: Mr. Reese
Mr. King

Research General

Messrs. Ballantine, Fuchs, Jaycox, Kanagaratnam, Rovani and Tolbert

December 1, 1975

John A. King JK

Research Financed out of Loans and Credits

1. As you may know, the Research Committee has been trying to compile a list of the research being financed out of loans and credits. Attached is a memorandum from Ben King asking our help in this matter and a list of such research by sector (excluding agriculture). Could you arrange to have this list reviewed for your sector and returned to me by close of business, Monday, December 8, with any appropriate revisions, deletions and additions.

2. What constitutes research may present some problems. The research assistant who made up the list was under instructions to err on the side of inclusion. Feasibility studies clearly should be excluded, but any study, the results of which might be of interest outside the project itself or the next phase of that project, should probably be included.

3. The heading "classification" on the table has not been used or fully thought out, but one "classification" is financing a research institution as opposed to financing a piece of research.

Attachment

JAKing:jlg

Research Ins. on Nutrition

November 25, 1975

Mr. Robert E. Klein, Director
Division of Human Development
Instituto de Nutricion de
Centro America y Panama
Apartado Postal 1188
Carretera Roosevelt Zona 11
Guatemala, C.A.

Dear Bob:

The INCAP Research Proposal on the effects of Honduras agrarian reforms is a thoughtful and constructive proposal. The formulation of the hypothesis and the research design clearly demonstrate you and your colleagues are up to such an ambitious undertaking.

Yet I have serious reservations about INCAP or anyone else concerned with applied nutrition research allocating limited resources in the proposed fashion. Why? In my judgment, there is good chance that the research project will produce little more than new knowledge about the factors explaining why implementation of a meaningful, comprehensive, agrarian reform is a slow process. That is, if the Honduras reform proceeds along the same pattern as most agrarian reforms, implementation will be slow and far short of its proclaimed ambitious goal. It would take quite a bit of optimism to ascribe a 50% chance to a speedy implementation of substantial reforms and also to ascribe a 50% chance to the event that the beneficiaries will have reaped all or most of the anticipated social and economic benefits during the five-year study period. There would then be a 25% chance that the study could adequately analyze the socio-economic impacts on the reform beneficiaries. The probability of discovering an impact on the nutritional status of pre-school children is obviously much less. Very important aspects of interest to nutrition policy -- i.e., a comparison of how specifically nutrition aimed interventions compare with general measures to improve socio-economic status — are not at all investigated in the proposed $2 million research project.

Practically all the stated hypotheses in the research proposal deserve testing for they are at the core of nutrition policy. However, I question whether it is desirable to design such a large research package in which the testing between adjacent events in a long chain depends on the establishment of the hypothesized outcome of prior events. In the extreme case, if the reform gets haphazardly implemented, it would be impossible to test the reform's effect on income, the effect of income on food consumption of the family, the effect on food consumption on pre-school children and finally, the effect on nutritional health, and so on all along the chain.

I realize that in order to test the dynamics (sequence of events over time), it is necessary to have longitudinal studies. However, perhaps the first order of priority is to provide firm evidence about the nature of the relationship between family income, home-food production, special food programs, general, political and nutrition education, health measures and a combination of these on nutritional health status in an environment in which sufficient time has elapsed for people to have adjusted their behavior to the observed levels of the explanatory variables.

In addition to the high risk nature of the proposed methodological approach, I would question the advisability of a nutrition research institute to provide the entire budget on a project which is intended to test many hypotheses of much wider policy significance than only nutrition. There is also the possibility of re-inventing the wheel by not involving sufficiently, say, the agricultural experts, who would have much to contribute on the relationship of the reforms to the farm economy.

The priority would be in my opinion to identify a sample which represents different income levels, minifundistas and landless laborers, and ecological environments and on the basis of a cross-sectional study to analyze the effect of those variables on food consumption and nutritional status. A second priority would be to subject groups which show poor nutritional status to some quick gestation interventions and to study their impact. Lastly, I would seek out cases where large scale data collection exercises on the developmental impacts of broad gauged programs are already underway and add on to them the collection and analysis of specific nutrition status related data.

Sincerely,

Alan Berg.
Senior Nutrition Advisor

bc: Dr. Ivan Beghin, INCAP
Dr. Jacobo Schatan, PAG

SReutlinger/ABerg/lgl

✓ Research gen. on Nutrition

November 25, 1975

Mr. Robert E. Klein, Director
Division of Human Development
Instituto de Nutricion de
Centro America y Panama
Apartado Postal 1188
Carretera Roosevelt Zona 11
Guatemala, C.A.

Dear Bob:

The INCAP Research Proposal on the effects of Honduras agrarian reforms is a thoughtful and constructive proposal. The formulation of the hypothesis and the research design clearly demonstrate you and your colleagues are up to such an ambitious undertaking.

Yet I have serious reservations about INCAP or anyone else concerned with applied nutrition research allocating limited resources in the proposed fashion. Why? In my judgment, there is good chance that the research project will produce little more than new knowledge about the factors explaining why implementation of a meaningful, comprehensive, agrarian reform is a slow process. That is, if the Honduras reform proceeds along the same pattern as most agrarian reforms, implementation will be slow and far short of its proclaimed ambitious goal. It would take quite a bit of optimism to ascribe a 50% chance to a speedy implementation of substantial reforms and also to ascribe a 50% chance to the event that the beneficiaries will have reaped all or most of the anticipated social and economic benefits during the five-year study period. There would then be a 25% chance that the study could adequately analyze the socio-economic impacts on the reform beneficiaries. The probability of discovering an impact on the nutritional status of pre-school children is obviously much less. Very important aspects of interest to nutrition policy -- i.e., a comparison of how specifically nutrition aimed interventions compare with general measures to improve socio-economic status -- are not at all investigated in the proposed $2 million research project.

Practically all the stated hypotheses in the research proposal deserve testing for they are at the core of nutrition policy. However, I question whether it is desirable to design such a large research package in which the testing between adjacent events in a long chain depends on the establishment of the hypothesized outcome of prior events. In the extreme case, if the reform gets haphazardly implemented, it would be impossible to test the reform's effect on income, the effect of income on food consumption of the family, the effect on food consumption on pre-school children and finally, the effect on nutritional health, and so on all along the chain.

I realize that in order to test the dynamics (sequence of events over time), it is necessary to have longitudinal studies. However, perhaps the first order of priority is to provide firm evidence about the nature of the relationship between family income, home-food production, special food programs, general, political and nutrition education, health measures and a combination of these on nutritional health status in an environment in which sufficient time has elapsed for people to have adjusted their behavior to the observed levels of the explanatory variables.

In addition to the high risk nature of the proposed methodological approach, I would question the advisability of a nutrition research institute to provide the entire budget on a project which is intended to test many hypotheses of much wider policy significance than only nutrition. There is also the possibility of re-inventing the wheel by not involving sufficiently, say, the agricultural experts, who would have much to contribute on the relationship of the reforms to the farm economy.

The priority would be in my opinion to identify a sample which represents different income levels, minifundistas and landless laborers, and ecological environments and on the basis of a cross-sectional study to analyze the effect of those variables on food consumption and nutritional status. A second priority would be to subject groups which show poor nutritional status to some quick gestation interventions and to study their impact. Lastly, I would seek out cases where large scale data collection exercises on the developmental impacts of broad gauged programs are already underway and add on to them the collection and analysis of specific nutrition status related data.

Sincerely,

Alan Berg
Senior Nutrition Advisor

bc: Dr. Ivan Beghin, INCAP
Dr. Jacobo Schatan, PAG

SReutlinger/ABerg/lgl

Research gen

Mr. John King, VPS November 25, 1975

Benjamin B. King, VPD Signed B. B. King

Research Financed out of Loans and Credits

1. As you know, we have been trying to compile a list of research financed out of loans and credits, other than agricultural projects which are covered in a similar compilation by Jim Fransen of the Agriculture and Rural Development Department. I attach eight copies of our latest list, which is intended to cover all such research through the end of FY75. The reason we are doing this is the apparent interest of the Board and the President in having a comprehensive view of research conducted in one way or another by the Bank. We do not intend to include this list in this year's report on research, but to have it as back-up material in conjunction with Fransen's report in case any questions should arise.

2. I would much appreciate your arranging that the list could be given a final check within the next ten days by the appropriate departments in CPS. An obvious question arises as to what is research. Some of these items might very well be excluded, but we have thought it safer in the first instance to include them. We did send out a similar table for FY75 alone some time in the summer. To this we got not a single comment from CPS. I hope that in this instance you will be able to arrange for a serious review. Perhaps we can discuss later how this record can be best kept up to date on a cooperative basis.

Attachments

cc: Mr. van der Tak (w/attch.)

BBKing:gm

RESEARCH COMPONENT FINANCED OUT OF LOANS & CREDITS
(Except Agricultural Projects)

| Project | Report Reference | Fiscal Year | Start Completion Date | Research Component | Financing: Total Project Amount | Loan/ Credit Amount | Research Total Amount | Component Loan/Credit Amount | Classification |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (US$'000) | | | | |
| **I. EDUCATION** | | | | | | | | | |
| Chad<br>Education II<br>Credit 251-CHD | Appr. Rep.<br>PE-27a<br>para. 4.13 | 71 | 1971-75 | Study of young farmer training schemes, pilot schemes using methods as short courses, young farmers association and youth camps have been initiated in Chad. A study to evaluate the results of these schemes will be undertaken. Under supervision of Ministry of Education. | 3.1 | 2.1 | 0.02 | 0.02 | |
| Greece<br>Education III<br>Loan 1134-GR | Appr. Rep.<br>755-GR<br>para. 4.19 | 75 | 1975-80 | Study of the present and projected development of the post-secondary education system. Includes diagnosis of the present situation, proposals for pedagogical reforms, analysis of needs for future expansion of post-secondary education in various fields. Identification of priority areas. Under supervision of the National Education and Religion and the Ministry of Coordination and Planning. | 105.6 | 45.0 | 0.50 | 0.50 | |
| Guyana<br>Education II<br>Credit 544-GUA<br>Loan 1106-GUA | Appr. Rep.<br>584a-GUA<br>para. 5.22 | 75 | 1975-80 | Study to assess the effectiveness of vocational and technical education in meeting Guyana's socio-economic objectives, and identify priorities for the long-term investment in education and training. | 18.9 | 4.0 Cr.<br>8.0 Lo. | 0.50 | 0.20 | |
| Ivory Coast<br>Education Project<br>Loan 667-IVC | Appr. Rep.<br>PE-7a<br>para. 3.12a | 69 | 1970-75 | Research on improving secondary school utilization and school locations. Under supervision of Ministry of Education. | 19.0 | 11.0 | 0.9 | n.a. | |
| Mali<br>Education Project<br>Credit 420-MLI | Appr. Rep.<br>140a-MLI<br>paras. 5.03, 5.04, Appendix IV | 73 | 1973-79 | Study of alternative structure for basic education in order to extend basic education and provide evaluation data useful in implementing similar systems in other countries. Under supervision of Ministry of Higher and Secondary Education and of Scientific Research. | 5.5 | 5.0 | 0.4 | n.a. | |
| Mauritania<br>Education<br>Credit 459-MAU | Appr. Rep.<br>255a-MAU<br>Summary & Conclusions<br>para. iii | 74 | 1974-77 | Koranic school experimental study to ascertain whether modest amount of support through simple instructional materials can materially increase the literacy and numeracy achieved by this instruction. Under supervision of the Ministry of Planning. | 4.8 | 3.8 | 0.34 | n.a. | |
| Nigeria<br>Education III<br>Loan 929-UNI | Appr. Rep.<br>60a-UNI<br>para. 4.05<br>Appendix III | 73 | 1973-79 | Study and testing of alternative schemes for primary education in Northern Nigeria. Under supervision of Institute of Education, Ahmado Bello University. | 107.4 | 54.0 | 0.94 | 0.75 | |
| Senegal<br>Education II<br>Credit 530-SE | Appr. Rep.<br>518a-SE<br>para. 3.01 | 75 | 1975-80 | The objective is to define a cheaper, more relevant form of basic education which might use national languages and allow local populations to participate in the management of the education system. | 19.0 | 15.0 | 0.20 | 0.17 | |
| **II. INDUSTRY** | | | | | | | | | |
| Finland<br>Pollution Control<br>Loan 1109-FI | Appr. Rep.<br>648a-FI<br>paras. 5.18-5.24 | 75 | 1975-78 | Research on alternative approaches to pollution control in the medium and long term. The aim is to advance Finland's capabilities in the field of cost benefit and systems analysis in water pollution control. Supervision: Finnish Government and other Finnish institutions. | 157.0 | 20.0 | 1.1/1 | n.a. | |
| Israel<br>Industrial Development<br>Loan 1116-IS | Appr. Rep.<br>656a-IS<br>paras. 4.04-4.37 | 75 | 1975-80 | Research to assist the government, specifically the Office of the Chief Scientist (OCS), to strengthen its capability to evaluate proposals for commercially oriented R&D. | 73.1 | 35.0 | 22.3 | 5.0 | |
| **III. POPULATION** | | | | | | | | | |
| Egypt<br>Population Study<br>Credit 437-UAR | Appr. Rep.<br>210-UAR<br>paras. 3.09-3.17 | 74 | 1974-77 | Study of family planning acceptance and evaluation, experimental home-visiting program for family planning motivation, study on improved maintenance of health facilities. | 10.5 | 5.0 | 0.25 | 0.25 | |
| El Salvador<br>Sites & Services<br>Credit 517-ES<br>Loan 1050-ES | Appr. Rep.<br>473a-ES<br>para. 3.16 | 75 | 1974-78 | A study undertaken by CONAPLAN/2 will focus on urban land-use problems, physical and social survey of squatter settlements and illegal subdivisions. | 15.5 | 6.0 Cr.<br>2.5 Lo. | 0.3/3 | n.a. | |
| India<br>Population<br>Credit 312-IN | Appr. Rep.<br>pp. 9a<br>para. 4.05-4.12, 4.19-4.23<br>Annexes 3 & 4 | 73 | 1973-78 | A. Experiment and test different approaches to delivery of family planning services in Mysore and Upper Volta Pradesh for possible application to other parts of the country.<br>B. Test the effect on nutrition for pregnant women both directly as an incentive for acceptance of family planning methods and indirectly through the effect of a decline in infant mortality.<br>C. Test the means of implementing nutrition programs.<br>Under supervision of the Government of India with assistance from the following: (i) Indian Institute of Management, (ii) Administrative Staff College at Hyderabad, (iii) Hyderabad Institute of Nutrition, (iv) All India Institute of Medical Service. | 31.8 | 20.0 | 8.4 | n.a. | |
| Indonesia<br>Population<br>Credit 300-IND | Appr. Rep.<br>pp. 8a<br>paras. 4.21-4.25<br>Annex 26 | 73 | 1973-78 | A. Strenghten the evaluation and research capability of the NFPCB/4 at central and provincial levels.<br>B. Enhance Indonesian institutional research capability in providing essential contract research as required and coordinated by the NFPCB.<br>C. Develop a specific research program based on a maternity centered approach to family planning to provide information essential to the development of the national program. The following agencies are responsible for the study: (i) Institute of Demography, (ii) Population Study Center of the Institute of Social and Economic Research, (iii) Population Council. | 33.0 | 13.2 | 1.9 | 1.9 | |

| Project | Report Reference | Fiscal Year | Start Completion Date | Research Component | Financing: Total Project Amount | Loan/ Credit Amount (US$'000) | Research Total Amount (US$'000) | Component Loan/Credit Amount (US$'000) | Classification |
|---|---|---|---|---|---|---|---|---|---|
| **III. POPULATION (continued)** | | | | | | | | | |
| Malaysia<br>Population<br>Loan 880-MA | Appr. Rep. pp. 12a paras. 4.11-4.12 | 73 | 1973-78 | A. Assist in the establisment of a project research unit at the National Family Planning Board to develop capability for operational research relevant to program evaluation.<br>B. Test and evaluate the pattern and intensity of delivering family planning services and new techniques of demand creation in rural areas. Under supervision of the Government of Malaysia; National Family Planning Board and Ministry of Health. | 14.5 | 5.0 | 0.7 | n.a. | |
| Philippines<br>Population<br>Loan 1035-PH | Appr. Rep. 333a-PH para. 5.10 | 75 | 1974-79 | Research and evaluation of family planning program. Fertility decline is the ultimate objective of the program. PPCOM (Commission on Population) is responsible for the research. | 50.0 | 25.0 | 0.51 | 0.33 | |
| Trinidad & Tobago<br>Population<br>Loan 743-TR | Appr. Rep. 73 pp. 3a paras. 4.17, 4.21 | 73 | 1972-75 | Research and evaluation of organization and procedures of population program and utilization of manpower. Under the supervision of the Ministry of Works. | 4.6 | 3.0 | 0.2 | 0.2 | |
| Tunisia<br>Population<br>Credit 238-TUN | Appr. Rep. pp. 4b paras. 4.12, 4.14 | 71 | 1971-75 | A. Evaluate the various components of the family planning program.<br>B. Determine operating costs and project program activities and resource requirements over an adequate time horizon.<br>C. Revise objectives, programs and budgets in the light of experience and change circumstances and design a further expansion of the program. Under supervision of the Tunisian Government. | 7.7 | 4.8 | 0.3 | 0.24 | |
| **IV. PUBLIC UTILITIES** | | | | | | | | | |
| Bolivia<br>Third Power Project<br>Credit 433-BO | Appr. Rep. 190a-BO para. 4.02 | 74 | 1974-76 | Power sector studies of the present and future availability of prices and consumption of energy by sources. Under supervision of the Direcion Nacional de Electricidad. | 7.3 | 6.0 | 0.1 | n.a. | |
| Brazil<br>Minas Gerais Water Supply and Sewerage Project<br>Loan 1009-BR | Appr. Rep. Annex 8 Schedule 1 | 74 | 1974-76 | Socio-economic study of the impact of water charges in Minas Gerais.<br>A. Establish an inventory of existing sewerage facility.<br>B. Identify sewerage disposal needs and estimate costs of required facilities.<br>C. Evaluate and propose sewerage tariffs sufficient to cover capital and operating costs. Under supervision of the State Water Company of Minas Gerais (COMAG). | 92.0 | 36.0 | 1.0 | n.a. | |
| Jordan<br>Second Power Project<br>Credit 570-JO | Appr. Rep. 733a-JO para. 3.06 | 75 | 1975-79 | Power development study for southern Jordan which would evaluate existing developments and future plans for industrial agricultural, tourist, rural, and urban developments and prepare forecasts of demand for the period 1976-85. JEA/5 is responsible for the project. | 22.0 | 5.0 | 0.25 | 0.20 | |
| Sudan<br>Power II<br>Credit 564-SU | Appr. Rep. 516a-SU para. 3.08 | 75 | 1975-79 | Power market and hydroelectric studies supervised by the Ministry of Irrigation and Hydroelectric Power. | 39.0 | 23.0 | 1.4 | 1.0 | |
| Syria<br>Power II<br>Loan 986-1SYR | Appr. Rep. 707a-SYR Annexes 1,4, 5,6,7 | 75 | 1975-79 | A. Energy power study to define the least cost development program for meeting forecast overall energy requirements.<br>B. Interconnection study - to determine the feasibility of interconnecting Syria's power system with those of its neighboring countries<br>C. Rural electrification study - to examine the technical economic and financial feasibility of a program for providing electricity to rural areas.<br>D. Gas study to determine the feasibility of using gas in the eastern part of Syria for commercial purposes. SOFRELEC/6 a consultant firm will carry out the studies. | 89.4 | 72.0 | A. 0.25<br>B. 0.64<br>C. 0.50<br>D. 0.38 | 0.20<br>0.50<br>0.40<br>0.30 | |
| Tunisia<br>Third Water Supply Project<br>Credit 989-TUN | Appr. Rep. 369a-TUN para. 3.01 | 74 | 1974-79 | Study of the economic cost of distributing potable waters which contain different levels of salinity. Under supervision of the Societe Nationale d'exploitation et de Distribution des Eaux. | 42.6 | 23.0 | 0.7 | n.a. | |
| **V. TRANSPORTATION** | | | | | | | | | |
| Liberia<br>Second Highway Project<br>Loan 907-LBR | Appr. Rep. 103a-LBR para. 4.08 | 73 | 1973-77 | Study the Liberian construction industry. Under supervision of the Ministry of Public Works. | 14.1 | 5.6 | 0.02 | 0.02 | |
| Mexico<br>National Port Development Study<br>Loan 820-ME | Appr. Rep. PTR-104a paras. 2.01, 4.02, 4.05 Annex 4 | 73 | 1972-75 | A. Evaluate and forecast future needs of seaborne traffic.<br>B. Investigate the availability of port installations and services.<br>C. Identify specific high priority port improvement projects. Under supervision of the Ministry of the Navy and the Comision Nacional Coordinadora de Puertos. | 27.6 | 20.0 | 1.0 | 0.5 | |
| Upper Volta<br>Rural Roads<br>Credit 579-UV | Appr. Rep. 738-UV para. 3.08 | 75 | 1976-79 | Study to review the cost effectiveness of construction methods used, analyze observed traffic, attempt to assess the link between transport costs and agricultural production. SERS/7 - Bureau of planning and programming will supervise the study. | 8.5 | 7.5 | 0.2 | 0.2 | |
| **VI. TOURISM** | | | | | | | | | |
| Tunisia<br>Tourism Infrastructure Project<br>Loan 858-TUN<br>Credit 329-TUN | Appr. Rep. para. 4.06 | 73 | 1973-77 | The study would assess whether the overall amount of incentives under the present system is economically justified. The study would also propose suitable selectivity criteria graduating investment incentives according to the location and category of hotels. Finally the study would propose all appropriate measures to simplify existing procedures and to render the system more easily administered. Under the supervision of Office Natic al du Tourisme et du Thermalisme (ONTT). | 55.0 | 10.0 Cr.<br>14.0 Lo. | 6.5 | n.a. | |

/1 The Government and other Finnish institutions will bear the cost of the research component.
/2 CONAPLAN - National Planning Agency.
/3 Research financed by the Government of El Salvador and private power companies.
/4 National Family Planning Coordinating Board.
/5 JEA - Jordan Electricity Authority.
/6 SOFRELEC - Societe Francaisse d'Etudes et de Realisations d'Equippement Eletrique.
/7 SERS - Service d'Entretien des Routes Secondaires.

November 21, 1975

Research gen

Mr. R. Gulhati, ECDDR November 25, 1975

Benjamin B. King, VPD Signed B. B. King

Dr. Sen's Proposal

1. In your draft memorandum of November 24, it might be worth mentioning in para. 2 that the IDRC study is one in which a number of countries are participating, among them India. IDRC makes a big thing about the projects they finance being the countries' own ideas.

2. It has never been clear to me whether Dr. Sen's proposal is his own or has some official backing from the Indian Government. If it is the former, then we are faced with a situation in which an Executive Director is trying to ram his own pet ideas down our throat. What if they all did it? If the proposal does have the support of the Indian Government, it doesn't necessarily make it any better, but one could at least start asking what sort of concerns there are in India about the problem and, even more, what institutions are prepared to open their books to us, if any sort of proposal were to go through.

3. This raises the question of sensitivity of this whole subject. The principal value of the IDRC's project is that a number of countries have gone into it voluntarily. I think the memorandum could say a little more about this subject, especially if we do not really know whether Dr. Sen is speaking on his own or not.

4. Paras. 5 and 6 in your memorandum really begs the question as to whether we should go on with this before Mr. McNamara has pronounced on it. My own impression is that the memorandum is far too conciliatory in the face of outrageous conduct, but perhaps that is part of the strategy.

5. Who is supposed to pay for this? Suppose you do reconsider and come up with something, will you submit it to the Research Committee? Or will it come out of Mr. McNamara's Contingency Fund? Or Dr. Sen's, since he seems to think he has one?

cc: Messrs. Chenery
Westphal

BBKing:gm

F244
Research General

Mr. Colin Bruce

November 25, 1975

Graham F. Donaldson

Annual Report on Research

1. This draft seems overlong and somewhat tortuous - it lacks sub-headings. It is so guarded that very few points come out clearly. Why should we be ashamed of research results or the content of the program?

2. Para. III 2. The decline in expenditure on R & D for/by Agriculture and Rural Development is serious. We ought to do something about that - fast. (I have some proposals!).

3. Paras. III 29-36 - on which we are asked to comment - seems particularly inconsequential; there are no incorrect statements that I can see.

4. Paras. IV 13-19 - on which we are also asked to comment - do have some questionable statements:

para. 13 - the ARDS is stated as originating in the Eastern Africa Region - this is not true. I believe that the Eastern Africa scheme was a parallel but later proposal. The files of the Development Economics Department will prove Tariq Husain and I were working on an outline some 6-9 months before the Hansen/Singh memoranda originated. Also, there were only 13 project reviews not 17 as stated;

para. 18. The findings of the Pakistan mechanization study clearly relate to large tractors on large farms in Pakistan and should not be expected to extend to other kinds of mechanization - except as they might influence future hypothesis for research or, at a general level, working hypotheses for project formulation. Why does this need to be said?

para. 19. The Evanson-Kislev study is a fancy but not very clever exercise that adds very little to our knowledge of research performance or innovation benefits. To suggest that it started a new field is ludicrous.

GFDonaldson:mt

440898 IBRO UI

611245SUDNE BR

FROM RECIFE 06/

INCOMING TELEX

Research General adK

(Telex NO.)

DGAA/DIR-917/75 139 24 0750

Distribution:

Mr. Scandizzo N258

INTBAFRAD WASHINGTON, D. C.

PASQUALE L SCANDIZZO DEVELOPMENT RESEARCH CENTER U.S.A.

DAA/DIR-917/75 24/11/1975

IDIR COMPLETAR RELATORIO PRIMEIRA FASE PESQUISA VG SOLICITO INFOR
MAR PROBABILIDADE SELECAO E PESO REFERENTE MUNICIPIOS NOMADCA CE
RNAR E SENTO SE VG SENHOR DO BONFIM VG TAPIRAMUTA VG SANTANA VG
IBITIARA VG JEQUIE VG BARRO PRETO VG ITAMBE E CONCEIRA BAHIA VG
BEM COMO AREA MEDIA VG DENSIDADE POPULACIONAL VG DENSIDADE DE ES
TABELECIMENTOS ET ESTIMATIVA EMPREGO POR ESTABELECIMENTOS VG RE-
FERENTES ESTADO BAHIA PARA ESTIMATIVA DOS GANHOS DECORRENTES DA
ESTATIFICACAO POR ZONA FISIOGRAFICA INCLUIDA PAGINA 31 CONTRIBUI
CAO BIRD RELATORIO PRIMEIRA FAZE VG ALEM VALOR Y1 Y2 Y3 Y4 ET NN

OS QUADROS 2 ET 3 PAGINAS / 32 ET 33 PT SOS

DIRETOR DAA/SUDENE

2411/14:37JNO

440898 IBRO UI

611245SUNE BR

Research gen

November 17, 1975

Dr. D. Tsuriell
International Cooperation Group
on Sand Dune Reclamation
Kiryat Shmuel
Haifa, Israel

Dear Dr. Tsuriell:

Thank you for your letter of September 23. Please forgive my delay in replying.

Your background document strikes me as a good sketch of what you want to do. I would suggest adding a paragraph or two describing in general terms what you mean by "plant cover, fences, and chemicals", and what kind of research underlies the development of these methods. I would also suggest that you break down the budget and provide more information about how your figures were arrived at. You should also indicate the nature of the output you expect the team to put out: [a report? (illustrated?), a book?, guidelines for choice of approach?, specific recommendations? (to whom?)], and the sort of data you expect to be able to gather: purely technical, detailed cost figures, techno-economic evaluation, or whatever.

As I explained to you, I think it very unlikely that the IBRD would provide direct support to the ICSR. At most, we would be able to guide you to possible sources of support.

As far as the proper proposer is concerned, a lot depends on the source from whom you hope to secure funding. For non-U.N. sources, ICSR is a perfectly appropriate applicant. Under normal circumstances, the same would be true for UNESCO.

The awkward part, of course, arises from the fact that much of the money available for the study of desert problems comes from Arab sources - the Kuwait Development Fund, etc. For this purpose, none of your four alternatives is really satisfactory, and you may have to make your solicitation through your Spanish or Italian members.

There is one other possibility which you might explore. The U.S. has binational commissions, similar to that for Israel, with a number of Arab countries. The scientific part of these is administered by the U.S. National Science Foundation. Some of their budgets are quite large. Your co-chairman from the U.S. Department of Agriculture may be able to investigate possibilities for support via these channels. I would suggest that he contact Dr. Devey or Dr. Bartoka at the NSF.

Sincerely yours,

Charles Weiss
Science and Technology Adviser

CW/cr

Research

Mr. H. Pilvin, ASA November 13, 1975

Benjamin B. King, VPD Signed B. B. King

Colombo Plan Staff College for Technician Education

1. I read the letter from this outfit quickly. If the Bank were to act as universal aunt for all such requests, even if worthwhile in some sense, it would have to have a much bigger budget than it has. The only conditions in which we might support it - under normal circumstances - are:

(i) It just happens to coincide with high-priority concerns of the relevant Bank departments in the educational field;

(ii) We would have some degree of input into the design of the study and control over its execution.

2. It occurs to me that there is an outside possibility that IDRC in Ottawa, who have a regional office in Singapore, might be interested since they are high on inter-country studies of a cooperative nature. But I would not suggest passing the buck before someone checks with them.

3. Do we need a meeting?

cc: Messrs. M. Hultin
T. King
John Simmons

BBKing:gm

P.S.

I am, of course, thinking of the Research Committee which would still have to pass on the project even if (i) and (ii) were met.

Research Gen.

November 11, 1975

Mr. Robert Ledogar
Room LX 2134
United Nations
New York, N.Y. 10017

Dear Mr. Ledogar:

It was good to speak with you again. I enjoyed reading the draft on land for the Factbook on Human Settlements, and wanted to give you the following reactions.

I think that a lot of mileage could be had from expanding the within-city density data to include comparisons at two or more points within the city, say center and periphery. A discussion of where squatters and other poor people locate within the city could then follow. A few years ago, the conventional wisdom placed newly arrived migrants at the periphery; now, a more complex pattern is recognized in which, depending on land values, job availability and the like, the poor may live close to the city center (to save on transport costs and work at jobs whose comparative advantage is at the center) or farther out to escape high land prices and build equity in a dwelling.

In general, calculations of land requirements using extrapolations of density coefficients should not be referred to as "demand". Although useful as a sketch of possible city layouts in the future, these measures are neither demand nor supply (which are both referred to in terms of price) but basically dimensionless parameters with significance for thinking about the problem but not very helpful for analyzing it.

The demand for land in economic terms is not only derived from the demand for housing and commercial activity but also from the portfolio choice of households and firms. This "asset demand" can be an important factor, especially where other outlets for investment are limited.

Darin-Drabkin's data, as you say, may not be fully trusted but they are the only game in town. On the other hand, his commentary seems distinctly less helpful. Recasting his ideas in your own words and sequence would, I believe, improve the presentation of this section.

Under fiscal controls (page 30), the array of capital gains taxes on land (land value increment taxes, betterment levies) could be added; transfer taxes also.

The housing study (A Task for Life) will appear under my name as a research publication for which the World Bank does not assume responsibility. It's fine to refer to it as having been done in the Bank (since it was), but that does not make it a "World Bank study". Also, I am now calling it simply Housing for Low Income Urban Families.

Thank you again for letting me see the draft. I hope we can keep in touch as our land research efforts continue.

Sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

OFGrimes:gm

Research gen

Mr. M. Ahluwalia, DRCID

November 11, 1975

Benjamin B. King, VPD Signed B. B. King

Some Stylized Facts

1. Your paper raises a lot of questions and that I suppose, is what it was meant to do. My personal taste, as I said, is for seeing what all this means for the absolute income underlying the shares. Consequently, I made up the accompanying table from your Table 1 (the "a" columns) - after a little table-cleaning1/.

2. In this table I took the liberty, which is probably quite illegitimate, of breaking the middle 40 up into two halves; by taking the difference between the lowest 40 and the lowest 60 and so on. The absolute figures at a level of $100 and $1,000 and the geometric average in between ($316) are shown on the first three lines. The figures were compiled on the back of an envelope over the weekend, but I think they are about right. On the second group of three lines, I assumed an arbitrary growth rate for the two stages. The corresponding growth rates for each group are then shown. Of course, I should have included your correction for growth rate first, but I didn't. It would make a little difference to the absolute figures but practically nothing to the growth rates in each bracket.

3. What surprises me about this exercise is that the growth rate of the lowest 40 is as large as it is in the first stage (A-B). Their average income at the beginning is extremely low2/ and one would suppose the lowest 40 is composed of the typical disadvantaged classes, the landless, the primitive tribal peoples and so forth. So how do they do so well? Can it all be increases in productivity? Maybe the real question is why the distribution is so bad to begin with, rather than why it gets worse with growth in total income.

4. Splitting the middle 40 up, if it is half way legitimate, gives some evidence of a trickle down effect with the turning point for the upper half of the middle 40

1/ I think the constant in Column 1a should have a negative sign and the figure for literacy rate in Column 2b should be 0.03. Also the turning point for 2b is something like 895, but more of that later.

2/ About the same (proportionately) as the lowest 40 in Gregory King's scheme!

coming first and the others following after. Perhaps if you broke the lowest 40 in two, it would show something similar. At any rate, in the second stage all except the top 20 do about equally well. The trouble again with the lowest 40 is the condition in which they start.

5. I would have liked to have done the same thing for the "b" tables, but lacked time and data[1/]. It is possible to have something somewhat less abstract than your Figure 1? I am not too clear what using mean values for the sample implies. I suppose some arbitrary figures have to be used and those are as good as any, corresponding to an income of $500 to $600. If the poor had the same advantages at lower incomes, they would be better off; correspondingly, if they had not got any better advantages at higher incomes, they would be worse off. Might it be better to choose a mean value of a sample of low income countries to show the growth of the discrepancy from $100 or so up? One question is whether some of these advantages or disadvantages are so closely associated with income levels as to be hard to tinker with.

6. I did go so far as to split up the middle 40 again using the "b" figures. This produced an interesting result. The "upper 20" had positive and negative coefficients respectively on lines 2 and 3, just like the top 20. Turning points for the upper and lower halves of the middle 40 were 1,331 and 1,226 respectively, but the turning, of course, is in different directions (the combination of the two gives a quite different figure of 895, as I said in the footnote). There is a rather remarkable consistency in the turning points for the four groups, but whether there is anything to this, I can't really say.

7. A final comment that I might make on this is: "Econometrica non olet". One misses the smell of what is going on. Maybe these stylized facts might subsequently be set against the appropriate facts of individual countries in order to see where the discrepancies lie, whether there are specific explanations and so forth. Perhaps this is the link between what you are doing and what the Regions could provide. Maybe that would be a productive use of comparative advantage.

1/ You didn't put any units in your table, but in any case I wouldn't have been sure what typical figures would be.

Attachment

BBKing:gm

## INCOME AND GROWTH RATES BY BRACKET

| | All | Top 20 | -----Middle 40------ Upper 20 | Lower 20 | Lowest 40 |
|---|---|---|---|---|---|
| Income per caput ($) | | | | | |
| A. | 100 | 266 | 95 | 65 | 37 |
| B. | 316 | 935 | 299 | 174 | 86 |
| C. | 1,000 | 2,791 | 1,022 | 614 | 287 |
| Growth rates/1 | | | | | |
| A-B | 4.9 | 5.4 | 4.9 | 4.2 | 3.6 |
| B-C | 4.9 | 4.7 | 5.3 | 5.4 | 5.2 |
| A-C | 4.9 | 5.0 | 5.1 | 4.8 | 4.4 |
| Turning points | - | 372 | 200 | 361 | 477 |

/1 Based on 24 years each stage

Note: Figures not adjusted for growth rate.

Research gen.

Mr. Larry Westphal

November 11, 1975

Percy S. Mistry

Small Scale Enterprise Development: Program for Research (Some Suggestions)

1. During the course of our previous conversations you asked me to commit to paper some of my thoughts on an "operationally relevant" research program to support the Bank's efforts in small and medium industry development. In the following paragraphs I attempt to present some not too well thought-out suggestions as pointers to what such a program might focus on.

2. At the outset it ought to be said that what traditionally seems to have captivated our interest when it comes to speculating about small industry would not, I think be terribly relevant for our immediate operational purposes. In this category I include research in such areas as intermediate technology, comparative analysis of capital/employment and capital/output ratios, crucial variables in the development of an entrepreneurial culture etc. This is not to say that research in these areas is not useful or unimportant. Its simply the kind of research that, in my view, is best left to other institutions whose efforts we might examine and support rather than undertake ourselves.

3. Since the Bank is likely to deliver SSE development assistance mainly in the form of support for national SSE programs, our immediate research effort should be oriented more toward determining the elements of a successful SSE promotion program mix in any given environment and attempting to establish the "true" costs and benefits 1/ to the economy of such programs. The absence of such an analysis, was I think was one of the major shortcomings of the Kochav report (or rather a shortcoming in the Terms of Reference for that study). A substantial amount of such research would involve the desk study of available material. Such research would essentially focus on measurement of impact which would help to confirm or dispel contradictory views on whether, say, the Indian program for SSE development can be deemed successful (it has certainly spawned a vast number of small firms) or a failure (are these firms, as suspected, inefficient and has the fragmentation of production retarded Indian industrial development?) It would also be useful in enabling the Bank to determine when and how such programs can result in overkill. At this point I think it would be useful to give some thought to how one measures SSE program costs and benefits and to make a brave (even if crude) attempt at such measurement in 9-10 country cases.

1/ Such measurement should, if possible, incorporate income distribution impact.

4. Assuming (optimistically) that such research might enable the Bank to differentiate between successful and unsuccessful program approaches, second-stage research might focus on each of the four elements of such programs (and indirectly on the optimal program mix): (i) the provision of finance; (ii) the extension of preparatory and post-operational technical assistance; (iii) entrepreneurial development and (iv) policy support through fiscal or other incentives.

5. With respect to the provision of finance, a lot of guesstimates have been made on the "cost" and "risk" factor in institutional lending to SSE. Virtually no sensible hard comparative research has been done which allows for other than vague generalizations. In no instance, to my knowledge, have these factors been related to institutional variables. Neither has much original thinking been done on how such costs and risks can be sensibly reduced (except for such obvious devices as guarantees, which are generally not the answer to the "default loss" problems that institutions confront). Having generally accepted that there are several institutional channels through which financing needs of SSE can be met, are we in some sort of position to attempt to measure whether certain channels are better than others by researching the relative successes of different institutions in different countries. We could begin by taking a sample of about 20 institutions in different countries with different characteristics and undertake a fairly deep analysis into the cost structure of lending, their actual risks and their perceived risks on SSE portfolios. Some of our projects might also give us some clues to this question and our research effort over the next 2-3 years could be programmed to distill lessons from our own experiences. Answers to such questions might also give us some leads as to how institutions might be configured to address SSE financing needs without undue reliance on the national kitty. Furthermore our concepts of financing and of institutions continue to center on the financing of fixed assets (thus favoring capital use) rather than working capital (which favors labor use and better capital utilization). We need better research into examining the working capital constraint.

6. On the technical assistance side we are confronted with the problem of organizing the right types of delivery systems to provide the right inputs at the right time to the right people. The design problem suggests that we have more questions than answers. A general view seems to be emerging from recent experience that certain types of preparatory and post-operational assistance can be provided through a general national network but that other assistance (mainly engineering and process/product associated experience) might best be delivered through specialized institutions which serve industry associations on an industry-by-industry basis rather than deal with the SSE sub-sector as a whole. Here again experiences have been catalogued but not studied in the sort of fashion that would enable the drawing of any sensible conclusions or provide any guide to the designing of a sound technical assistance scheme. At present our approach is very much one of tacking together what can expediently be arranged rather than addressing the problem from the viewpoint of the client's needs and proceeding from there. Some research in this area would be illuminating.

7. Entrepreneurial development is one of the present day "in-topics" on which a great deal of work is being done by a number of agencies and it seems likely that over the next 4-5 years we might get from the hot-air stage to something concrete which can be incorporated into specific educational programs. At this stage the Bank's research effort should, I think, leave this aspect out of its direct ambit. The Bank should, however, be aware of developments in this area.

8. Policy-support is one area that we need to know much more about; especially the manner in which indirect support is provided through bolstering the resources of financial institutions, maintaining low-interest rates, providing resources through the administrative budgets of its various agencies etc. We also need answers to such questions as:are fiscal incentives worth using to promote SSE growth? Is selective credit policy a workable promotional device for SSE development? Do locational incentives make any real difference? Can policies be developed to encourage a greater flow of inter-firm credit to smaller firms? Are policy-incentives which encourage sub-contracting from smaller suppliers workable? etc. How we approach such questions from the Bank end is a difficult nut to crack but it seems to me that we must make the attempt.

9. A final point. I think that the Bank's whole approach to SSE development (and this may affect our research) needs some examining and it would seem opportune to do so now. A very great number of people (and papers) in this institution seem to be premising their views on the "small is beautiful" assumption and looking for ways in which we can successfully turn big into small, or to prevent small from growing big by emphasizing smallness for its own sake. This approach leads to viewing the SSE development problem in a particular perspective and manner. On the other hand, some of us view the problem as being one of alleviating those constraints which prevent potential entrepreneurs from getting started and/or of growing. This view is, I think, in nature and degree, substantially different from the first. The link between the two is the degree of zeal with which one approaches the task of alleviating constraints; over-zealous pursuit would lead to the second approach spilling over into the first. The dividing line is a fine one and I'm not sure that one knows whether its been crossed until the damage has been done. A research program which drew attention to this line would I think prove salutory both for the Bank and its borrowers.

cc: Mr. Loeschner
Mr. Powell

PSMistry:aa

Research gen

November 7, 1975

Professor Martin Carnoy
Director, SIDEC
School of Education
Stanford University
Stanford, California 94305

Dear Martin:

I hope to be able to start drafting my (long delayed) study on education finance and income distribution in Brazil in a few weeks.

I would like to start the study by a review of the controversy over recent trends in income distribution in Brazil. Starting with the work of Fishlow followed by Langoni's book, I would like to end with your own contributions. Unfortunately, the only study that I have at hand is Langoni's book and I wonder whether you would be kind enough to tell me the exact references for these other works if they have been published or, if not, to send me a mimeographed copy of each. Of course, if you have summarized the debate somewhere, I would be happy to use your work.

I briefly talked with your friend Levin a few weeks ago in Princeton and he reminded me about Jacques Velloso's thesis on Brazil. Is there a way of getting this study? I think many people in the Bank would be interested in it. I don't intend to write more than about ten pages on all this and again this is just as an introduction to my own analysis.

Thank you very much for your help and please feel free to make any additional suggestions if I have missed something interesting.

Regards,

Sincerely,

Jean-Pierre Jallade
Senior Economist
Education Department

JPJ/nm

Research gen

Mr. David Bates, AGP

November 6, 1975

Orville F. Grimes, Jr., VPD

Non-RPO Research

1. We appreciate the material your Department has already submitted on research activity not funded through the External Research Program and also (per our discussion over the phone) your providing breakdowns of the staff time and other resources involved in these efforts. To keep this task within manageable bounds, we are interested mainly in estimates by broad category, as in the following suggested format:

| | FY75 | FY76 |
|---|---|---|
| Staff-months (professional) | | |
| Staff-months (assistant) | | |
| Consultant fees | | |
| Travel | | |
| External Computing | | |

2. A project-by-project breakdown is desirable if it is handy, but not if it is not. Some notion of which projects are responsible for the bulk of effort within each category would be enough.

cc: Messrs. C. Bruce
B. B. King

OFGrimes:gm

Research gen.

Ms. Myrna Gary, EPDDR

November 6, 1975

Orville F. Grimes, Jr., VPD

Non-RPO Research

We appreciate the material your Department has already submitted on research activity not funded through the External Research Program and also (per our discussion over the phone) your providing breakdowns of the staff time and other resources involved in these efforts. To keep this task within manageable bounds, we are interested mainly in estimates by broad category, as in the following suggested format:

| | FY75 | FY76 |
|---|---|---|
| Staff-months (professional) | | |
| Staff-months (assistant) | | |
| Consultant fees | | |
| Travel | | |
| External Computing | | |

2. 2 A project-by-project breakdown is desirable if it is handy, but not if it is not. Some notion of which projects are responsible for the bulk of effort within each category would be enough.

cc; Messrs. W. Tims
B. B. King

OFGrimes:gm

Research gen

Mr. Hollis B. Chenery, VP - VPD

November 4, 1975

Orville F. Grimes, Jr., VPD

Insertion to Foreword of "Abstracts" Booklet

If you feel this addition is suitable, I'll forward the galleys to Information and Public Affairs as our final version.

Attachment

cc: Mr. B. B. King
Ms. M. Hazzah

OFGrimes:gm OG

Since publication of last year's Abstracts,[1/] the following projects in the research portfolio have been completed: Multi-Level Planning: Ivory Coast (No. 670-04); Survey of Economy-Wide Models (No. 670-10); Reappraisal of Credits for Financing Farm Mechanization in Pakistan (No. 670-12); Agricultural Sector in Mexico (No. 670-16); Rural Development in Africa (No. 670-18); Measurement of Road Width/Vehicle Speed Relationships (No. 670-28); Compilation of Highway Design Standards (No. 670-32); Analysis of Problems and Issues in Village Electrification (No. 670-38); Pricing and Investment in Electricity Supply (No. 670-39); Urban Data Needs of the World Bank (No. 670-41); Professional Structure in Southeast Asia (No. 670-42); Costa Rica Employment Survey (No. 670-47); Rural and Urban Public Works (No. 670-75); Benefits of Schooling for Workers (No. 670-91); and Urban and Regional Subsystems in Peninsular Malaysia (No. 670-97). Many of these are listed in the current edition of this booklet to mark the progress of recently completed research toward the dissemination of results and their use in development planning and policy.

1/ See World Bank Research Program: Abstracts of Current Studies (October 1974).

Research gen

October 31, 1975

Dr. Lauchlin Currie
Departamento Nacional de Planeacion
Bogota, D.E., Colombia

Dear Dr. Currie:

Again I must thank you for offering me your latest work and apologize for not yet having produced mine (the study of France). We have made progress on other portions of the research on urban land markets and methods of land use control, but preparation of the report on France is still at least three months away. On that point I do have the benefit of being able to work closely with John Banta of the Conservation Foundation here in Washington, who is coordinating a large International Land Use research project dealing with land and the environment. He spent four months in France earlier this year and is aware of the latest developments.

On page 9 of your report, it occurred to me that a possible link between the allocative and distributive functions of rising land values lies in the fact that land price effects can stem from direct actions of the public authorities -- rezoning, as you mention earlier, and water main installations -- as well as general economic advance and scarcity rents. No matter whose figures are used, projected rates of urban population increases are indeed staggering. I thought you would be interested in a recent paper on this subject, written chiefly by two colleagues (Cohen and Renaud) in Doug Keare's urban group.

Secretary Peñalosa told me last week that land issues will be a major focus at Habitat and that future Preparatory Committee meetings will deal with the specifics. That is encouraging.

With best regards,

Sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Attachment

OFGrimes:gm

Research gen

Ms. Elinor Yudin, EPDIE

October 31, 1975

Orville F. Grimes, Jr.

List of Countries and Participating Institutions (ICP) for Board Research Report

1. Here is the list from last year and our candidates this year for inclusion as developing countries and institutions participating in the ICP:

A. Last year's list

| Country | Participating Institution |
|---|---|
| Argentina | Instituto Nacional de Estadistica y Censos, Buenos Aires |
| Colombia | Departamento Administrativo Nacional de Estadistica, Bogota |
| India | Central Statistical Organization, New Delhi |
| Iran | Central Bank of Iran, Tehran |
| Kenya | Central Bureau of Statistics, Nairobi |
| Korea | Bank of Korea, Seoul; Bureau of Statistics, Seoul |
| Malaysia | Department of Statistics, Kuala Lumpur |
| Philippines | National Census and Statistics Office, Manila |
| Thailand | National Economic Development Board, Bangkok; Ministry of Commerce, Bangkok |
| Venezuela | Banco Central de Venezuela, Caracas<br>Ministerio de Fomento, Caracas |

B. Possible Additional Entries this Year

| Country | Participating Institution |
|---|---|
| Brazil | ? |
| Mexico | ? |
| Tanzania | ? |
| Zambia | ? |

2. I would be grateful if you could supply the missing elements in this table and, in general, verify that the information is current for this year's Board report. We would appreciate receiving this information by Friday, November 7. Thank you.

cc: Ms. Hazzah

OFGrimes:gm

Research gen
(Narangwal Proj)

October 31, 1975

Dr. Jacobo Schatan
Director, PAG Secretariat
Rm. A-606
United Nations
New York, New York

Dear Jacobo:

The World Bank is currently considering a $115,000 contract with the Johns Hopkins University to analyze its data collected in connection with the Narangwal project, with which you are familiar.

We sense the mass of information meticulously collected over the lengthy project period offers the nutrition community a unique opportunity to quantify certain policy-oriented issues, in a way that would be beneficial to country nutrition programs and to the agencies assisting in those programs.

The Bank Research Committee, which is responsible for approving such contracts, found the attached proposal lacking in specificity. Because of the wealth of data, concern was expressed that without a clearer definition of the policy questions to be addressed, the end result of the analysis may be a vast collection of data that would be illuminating, but not necessarily problem focussed. Accordingly, we are obliged to come up with a list of concrete questions of direct relevance for country programing, toward which the analysis can be aimed. Questions need to be sufficiently specific to have practical application.

One example might relate to the issue of "scaling". We know that it is not practical for most countries to attain 100% of recommended allowances. If a country had $10 million to devote to nutrition, should it use it to assist 1 million children to reach 100% of the recommended allowances? 3 million children to reach a 90% level? Or 5 million children to reach an 80% level? Are there certain important thresholds that can be identified from the data, i.e., perhaps a child receiving 90% of allowances will get along satisfactorily, but at 88% considerable damage may occur. The degree of damage thereafter may or may not be proportionate to the degree of nutritional deprivation. Can the data quantify what specific damage nutrition short-falls at various levels will cause (in terms of growth, types and duration of illnesses, functional performance, etc.)?

I would be grateful if you would circulate the attached proposal to all members of the PAG and representatives of the sponsoring agencies to solicit specific policy- and program-oriented questions they believe might be addressed in the analysis of the Narangwal data. It goes without saying we also would welcome your own personal suggestions.

Inasmuch as we are meeting with the Johns Hopkins group the last week of November, I would be grateful if you could give this matter a sense of urgency, requesting that the recipients submit their suggestions to me directly, to arrive no later than November 20. For those PAG members to whom distance poses a problem, short cable responses would be appreciated.

Sincerely yours,

Alan Berg
Senior Nutrition Advisor

Attachment

ABerg/lgl

Research gen
(Narangwal
Proj)

October 31, 1975

Mr. Robert Muscat
Mr. James E. Austin
Mr. James Greene
Mr. F.J. Levinson
Mr. James M. Pines

Dear Bob and Jims[4]:

The World Bank is currently considering a $115,000 contract with the Johns Hopkins University to analyze its data collected in connection with the Narangwal project, with which you are familiar.

We sense the mass of information meticulously collected over the lengthy project period offers the nutrition community a unique opportunity to quantify certain policy-oriented issues, in a way that would be beneficial to country nutrition programs and to the agencies assisting in those programs.

The Bank Research Committee, which is responsible for approving such contracts, found the attached proposal lacking in specificity. Because of the wealth of data, concern was expressed that without a clearer definition of the policy questions to be addressed, the end result of the analysis may be a vast collection of data that would be illuminating, but not necessarily problem focussed. Accordingly, we are obliged to come up with a list of concrete questions of direct relevance for country programing, toward which the analysis can be aimed. Questions need to be sufficiently specific to have practical application.

One example might relate to the issue of "scaling". We know that it is not practical for most countries to attain 100% of recommended allowances. If a country had $10 million to devote to nutrition, should it use it to assist 1 million children to reach 100% of the recommended allowances? 3 million children to reach a 90% level? Or 5 million children to reach an 80% level? Are there certain important thresholds that can be identified from the data, i.e., perhaps a child receiving 90% of allowances will get along satisfactorily, but at 88% considerable damage may occur. The degree of damage thereafter may or may not be proportionate to the degree of nutritional deprivation. Can the data quantify what specific damage nutrition short-falls at various levels will cause (in terms of growth, types and duration of illnesses, functional performance, etc.)?

I would be grateful if you would give some thought to specific policy- and program-oriented questions you believe might be addressed in the analysis of the Narangwal data. Inasmuch as we are meeting with the Johns Hopkins group the last week of November, I would be grateful if you could get back to me no later than November 20.

Sincerely yours,

Alan Berg

Attachment

ABerg/lgl

Research gen

October 30, 1975

Prof. Daniel W. Bromley
Dept. of Agricultural Economics
University of Wisconsin
1450 Linden Drive
Madison, Wisconsin 53706

Dear Prof. Bromley:

I am replying to your letter of October 23-to Dr. Chenery regarding Alfredo Sfeir-Younis. First, I should tell you what is not possible. As we do not make grants for research analogous to those made by a Foundation, the "preferred solution" is excluded.

There are, broadly speaking, two possibilities. The first is fixed-term employment on the Bank's staff in a department concerned with research. The second is employment as a consultant to the Bank in connection with a Bank research project, ongoing or planned for the near future. I have sent the papers you enclosed to the departments in the Bank most likely to be interested. When they have had a chance to look at them, we will get in touch with you again.

Yours sincerely,

Signed B. B. King

Benjamin B. King
Research Adviser
Development Policy

BBKing:gm

cc: Messrs. Chenery
Duloy (incoming letter; "post-doctoral proposal"; "recent paper" attached)
Ray (incoming letter; "post-doctoral proposal" attached)

Research gen

Mr. O. Grimes
Mrs. M. Hazzah

October 30, 1975

B. B. King Signed B. B. King

Bellagio-plus - SSR System

At Ottawa, Ruth Zagorin said that this system of exchange of information on research projects between the five agencies was now "operational". This, so far, means that we have information, which I brought back, on IDRC's projects in the five chosen fields. We are, for well-known reasons, rather behind with our work on the master project sheets, which Mona is working on1/. When we get around to it again, I suggest we do first those projects pertinent to the SSR System. I attach a list for comment, especially on the queried ones, at an appropriate time in the future.

1/ We are lucky in the Canadian mail strike, which may go on until Easter. It provides a fortuitous excuse!

Attachment

BBKing:gm

# First List of Bank Projects for IDRC's SSR System

## Labor/Employment/Income Distribution

| Section I | Section VIII |
|---|---|
| 670-06 | 670-43 |
| 670-09 | 670-45 |
| 670-69 | 670-47 |
| 670-83 | 670-75 (?) |
| 670-84 | 670-90 |
| 670-85 | 671-06 |
| 670-96 | 671-07 |
| 671-08 | 671-26 (?) |
| | 671-30 |
| | 671-31 |

## Rural Development & Agriculture

Section III - All in new abstract list
Section V - 670-29, 670-71, 671,14
Section VI - 670-38

## Urbanization

Section VII - All in new abstract list
Section VI - 670-67, 671,12 (?)

## Population/Health/Nutrition

Section VIII - 670-99, 671-02, 671-15

## Education

Section VIII - 670-44, 670-78, 670-91, 671-19, 671-33 (?)

October 30, 1975

Research gen

Mr. Ravi Gulhati, ECDDR

October 29, 1975

Benjamin B. King, VPD Signed B. B. King

Research Proposal, "Narangwal Population and Nutrition"

1. The Research Committee in a meeting on October 23 decided that, although the research proposed was of potential usefulness for the Bank, some questions remained about the design and objectives of the project. Specifically, many Committee members were uncertain about the suitability of the data for Bank research objectives, the operational significance of the broad issues to be treated, and the amount and type of Bank economic expertise forthcoming to bolster the Johns Hopkins research team.

2. The Committee consequently approved $10,000 as a "program grant" to meet expenses incurred over a period of one to three months in reformulating the proposal to address these issues. In their deliberations with the Johns Hopkins team, Timothy King and his staff should work closely with an informal advisory group, under the general guidance of Herman van der Tak, composed of members of the Population and Nutrition Projects Department and other interested Bank staff. A revised proposal would then be considered in the normal course of a future Research Committee meeting, although there is of course no guarantee that it would be approved.

cc: Messrs. T. King
Chernichovsky
Faruqee
van der Tak
Kanagaratnam
Mrs. Hazzah

OFGrimes:gm

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

Research file

# OFFICE MEMORANDUM

TO: Research Committee Members

DATE: October 28, 1975

FROM: Orville F. Grimes, Jr., VPD

SUBJECT: Minutes of Meeting on October 23, 1975

1. Attending the meeting were Messrs. Chenery, Balassa, B. de Vries, Jaycox, Karaosmanoglu, B. B. King, Lerdau, Schulmann, Thalwitz, van der Tak, Waelbroeck, Yudelman and Grimes. Present for the education strategy paper discussion were Messrs. T. King, Jallade and Simmons. Mr. Winterbottom (Information and Public Affairs Department) attended as an observer.

Income Distribution in Thailand - Phase I (671-36)

2. This project was approved as presented. The total authorization (FY76 and FY77) is $53,000 of which $42,000 is authorized for FY76. Mr. de Vries and others suggested that early discussions between researchers and potential users in the Regional Offices would help give the project a better articulated focus in operational work. Mr. Jaycox said that liaison with members of the Urban Poverty Task Group is also desirable, especially to help define target populations for urban-oriented projects.

Narangwal Population and Nutrition

3. Despite general agreement that the research proposed under this project was of potential usefulness for the Bank, many questions about the design and purpose of the project had not yet been resolved to the Committee's satisfaction. Uncertainties remained about the suitability of the data for Bank research objectives, the operational significance of the broad issues to be treated in the research (deriving in part from lingering uncertainty as to what these issues were), and the nature and magnitude of the economic inputs needed to bolster the Johns Hopkins research team.

4. The Committee accordingly approved a "program grant" of $10,000 to meet expenses incurred in reformulating the proposal over a maximum of three months. In their deliberations with the Johns Hopkins team, Mr. T. King and other Bank sponsors should work closely with an informal advisory group composed of members of the Population and Nutrition Projects Department and other Bank staff under the general guidance of Mr. van der Tak. A revised proposal would then be considered in the normal course of a future Research Committee meeting.

Supplemental Requests

5. The following supplemental requests were approved as presented:

(a) An increase of $40,000 in the Bank's contribution to the International Comparison Project (No. 670-68). The total Bank commitment to this project for FY75-78 thus becomes $400,000.

(b) An additional authorization for FY76 of $16,000 in computer funds for Distributive Impact of Public Expenditures (No. 670-96).

(c) An additional authorization for FY76 of $20,000 for the Singapore Traffic Restraint Study (No. 671-20), for the purposes stated in Mr. Jaycox's memorandum to Mr. B. B. King of September 19, 1975. To the extent that funds turn out not to be required for these purposes, they will be returned.

Proposal for a Research Strategy and Program in Education

6. The Committee discussed a paper on education research prepared by the Education Projects and Development Economics Departments (memorandum from Messrs. Ballantine and Gulhati to Mr. B. B. King, June 12, 1975). Messrs. Jallade and Simmons participated in this discussion. The paper identified six priority areas for policy-oriented research:

(i) the process of learning;
(ii) education and employment;
(iii) education and rural development;
(iv) equity;
(v) cost and finance; and
(vi) evaluation, planning and management.

Committee members said that these categories were so all-inclusive as to admit all potential research on an equal footing. It was felt that the paper provided a wide-ranging overview of possible research categories much more than a strategy for setting priorities in Bank education research. It fails to pinpoint those research topics not worth pursuing, either because past research on them has led nowhere or because sufficient knowledge has been accumulated that additional effort would have a low marginal return. Nor does it identify research areas in which the Bank has a comparative advantage. Messrs.

Simmons and Jallade said that progress has been made in setting up priority topics within the broad categories -- "education and rural development" was one -- and it was agreed that additional work in this area should be pursued with interested Departments.

Distribution

Messrs. Chenery, Balassa, B. de Vries, Jaycox, Karaosmanoglu, B. B. King, Lerdau, Schulmann, Thalwitz, van der Tak, Vergin, Waelbroeck, Yudelman

cc: Messrs. Simmons, Jallade, T. King, Gulhati, Ballantine, Winterbottom

RESEARCH-GEN

Mr. Mahbub ul Haq, EPRDR October 23, 1975

Benjamin B. King, VPD Signed B. B. King

Policy Papers and Research

1. We are trying to compile a list of policy or issues papers which might have had some connection with research projects. I have compiled the attached list from the Policy Paper Inventories we have and miscellaneous scattered sources. It is restricted to completed projects, since this is our immediate interest; it will be extended later.

2. In the last column is a list of reports generated by these papers, insofar as we know them. I would be grateful if you could:

(i) Identify the missing ones and correct any mistakes;

(ii) Supply us with copies of any reports you have available, other than those marked with an asterisk, which we have, and the Health SPP, which we have ordered.

(iii) Indicate which papers went to the Board (or are freely available to it).

3. Can you think of some more automatic system whereby the left hand (we) can keep abreast of what the right hand (you) is doing?

Attachment

cc: Messrs. Chenery
Karaosmanoglu
Burki
Grimes

bcc: Mr. Muir

BBKing:gm

## List of Policy/Issues Papers Possibly Related to Completed Research Projects

| No. | Title | RPO 670- | Reports[1/] |
|---|---|---|---|
| **I. Policy Series** | | | |
| P01W74 | Issues in Village Water Supply | 37 | Report No. 793, 6/75* |
| P02P74 | Issues in Rural Electrification | 38 | Report No. 517 7/74* |
| P02U74 | Bank Policy in Urban Transport | 34 | Urban Transport SPP 5/75* |
| P03P74 | Economic Evaluation of Public Utility Projects | 39 | Distributed for comment (9/74) |
| P05A74 | Rural Development | 18 | Rural Development SPP 2/75* |
| P06G74 | Promotion of Domestic Construction Industries | 31 | R73-291, 1/74 |
| P07A74 | Comparative Analysis of Cocoa Production in Selected Countries | 81 | SecM74-528* 7/74 |
| P12G74 | Criteria for employment of departmental forces in Bank-financed civil works | 31 | Not known. (Incl. 4/74, dropped before 8/74) |
| P01E75 | Education Sector Policy Paper | 46<br>51 | Education SPP 12/74* |
| P03N75 | Bank Group Activities in the Field of Health | 48 | (i) Health SPP 3/75<br>(ii) Background paper to be issued as Working Paper |
| **II. Issues Series** | | | |
| I01T74 | Highway Sector Lending | 32 | Distributed to Board (7/75) |
| I02T74 | Lending for Railways | 33 | Completed as dept. report (8/75) |
| I03E74 | Non-formal Education | 51 | Not Known |
| I04I74 | Selected Issues in Bank Group Assistance to Industry | 77 | Dropped as separate paper (7/75) |

1/ Dates in parentheses refer to Policy Paper Inventories.
* In our possession.

| No. | Title | RPO 670- | Reports[1/] |
|---|---|---|---|
| I05G74 | Highway Design Standards Study | 32 | Distributed by TUPD (10/74) |
| I06G74 | Public Works as a Policy Instrument | 75 | Staff level dist. 10/31/75 |
| I03A75 | Farm Technology | 12<br>50 | Staff level dist. 3/31/76 |

October 22, 1975

Research gen.

Mr. B.B. King

Wouter Tims

Non-RPO Research

October 21, 1975

Non-RPO research in EPD is concentrated in the study of the prospects for primary commodities and for developing countries. A substantial part of this research has been connected with the Bank's effort to understand the implications of higher energy prices for the growth of developing countries.

The following is a list of major reports generated by this work:

1. M. Celasun and F. Pinto: "Energy Prospects in OECD Countries and Possible Demand for OPEC Oil Exports to 1980", forthcoming as IBRD Working Paper.

2. J. De Vries: "Structure and Prospects of the World Coffee Economy", Working Paper No. 208.

3. E. Grilli: "The Impact of the Oil Crisis on the Competitive Position of Jute and Hard Fibers", September 1974, issued as Commodity Paper No. 11.

4. J.W. Gunning and J. Waelbroeck: "The Logic of Adjustment to Higher Energy Prices: An Optimal Control Analysis", presented at the Third World Congress of the Econometric Society, Toronto, August 20-26, 1975.

5. J.W. Gunning, M. Osterrieth, J. Waelbroeck: "The Price of Energy and Potential Growth of Developed Countries, an Attempt at Quantification", forthcoming in the European Economic Review.

6. S. Gupta: "Income Distribution, Employment and Growth: a Case Study for Indonesia", IBRD Working Paper No. 212.

7. N. Hicks: "The SIMLINK Model for Trade and Growth for the Developing World", forthcoming in the European Economic Review.

8. A.C. Huang: "Prospects for Exports of Bauxite/Alumina/Aluminum from Developing Countries", October 1974, issued as Commodity Paper No. 12.

9. J. Nusbaumer: "The World Banana Economy: Prospects for Change 1974 - 1980", February 1975, issued as Commodity Paper No. 15.

10. J. Schilling: "A Long-Run Projections Model for Zaire", EPD Working Paper.

11. S. Singh, J. De Vries, J. Hulley, P. Yeung: "Coffee, Tea and Cocoa - World Bank Lending Policies and Market Outlook", World Bank Occasional Staff Paper, forthcoming.

12. E. Stern, W. Tims: "The Relative Bargaining Strength of the Developing' Countries", American Journal of Agricultural Economics, May 1975.

13. M.E. Thigpen: "The Impact of Increased Oil Prices on the Cost and Prices of Apparel Type Natural and Synthetic Fibers", March 1975, issued as Commodity Paper No. 16.

14. W. Tims: "Higher Oil Prices and the World Economy; the Adjustment Process", Brookings, November 1975.

15. W.C. Tyler: "Long-Term Projections for Middle Eastern and East African Consumption, Production and Trade in Meats", September 1975, issued as part of joint FAO/IBRD study, directed by Patrick Yeung.

JWaelbroeck:aws

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

# OFFICE MEMORANDUM

TO: Mr. B. King

DATE: October 17, 1975

FROM: Ardy Stoutjesdijk AS

SUBJECT: The Dichter proposal

I have read the Dichter proposal, and I share your lack of enthusiasm. The proposed study is very Philippine-specific, and looks to me like the kind of research someone would have to undertake in order to be able to prepare a feasibility study focusing on the modernization of grain storage facilities in that country. It is market research, not research in the sense we normally define it.

AS:vak

Research gen

October 16, 1975

Dr. Alberto Galofre Cano, Director
Instituto de Desarrollo Urbano
Carrera 7, No. 20-99
Bogota, D.E.
Colombia

Dear Dr. Galofre:

Some months ago, a World Bank research team visited Bogota to undertake research on urban land policies, as part of a worldwide study of methods of promoting better use of land in cities. A draft report on the operation of valorization charges in Bogota was completed and delivered to IDU at the end of July.

At the time of our visit over a year ago, it was suggested that IDU be able to give comments on the report before other agencies in Bogota (in particular, Planeacion Distrital and EAAB) had seen it. We have respected these wishes. However, since it now seems sensible to have these other organizations give their views also, we hope you will not mind our giving one copy of the report to Planeacion Distrital and another to EAAB.

We wish to emphasize that this report is only a draft. We welcome your comments and reactions to the report and look forward to discussing it with you. If you feel any changes should be made in the substance or form of the report please let us know. We feel that our conclusions will be regarded positively by yourselves and others in Colombia, since a major conclusion of the report is that Colombia is far advanced in valorization techniques, using methods of much potential interest for other countries.

If you have comments on the report or desire extra copies, please let me know, or contact Mr. Carlos Quijano, the Resident Representative of the World Bank in Bogota. His address is

Edificio Aseguaradora del Valle
Carrera 10 No. 24-55, Piso 17
Tel. 82-7805

I look forward to hearing from you. With best regards,

Sincerely yours,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Cleared with and cc: Mr. Sporon-Fiedler, LAC
Mr. D. D. Singh, TRU

OFGrimes:gm OG

Research
Gen

October 16, 1975

Letter No. 83

Mr. Carlos Quijano
Resident Representative
Banco Mundial
Edificio Aseguaradora del Valle
Carrera 10 No. 24-55, Piso 17
Bogota, D.E.
Colombia

Dear Mr. Quijano:

As you requested, I enclose three additional copies of Professor William Doebele's report on valorization in Bogota, as well as copies of the relevant correspondence of last July. It is indeed a bit disappointing that IDU has not yet commented on our report, but we understand their time constraints. We would of course welcome any comments or reactions they have.

Thank you also for giving copies to Planeacion Distrital and to EAAB. Their comments will also be valuable.

We further welcome your help in obtaining clearance for publication from the Secretaria de Hacienda as soon as possible.

With best regards,

Sincerely,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Enclosures

Cleared with and cc: Mr. Sporon-Fiedler, LAC
Mr. D. D. Singh, TRU

OFGrimes:gm OG

July 23, 1975

Letter No. 59

Mr. Klas Ringskog
Banco Mundial
Edificio Aseguradora del Valle
Carrera 10 No. 24-55, Piso 17
Bogota, D. E., Colombia

Dear Klas:

Enclosed is a draft of Professor William Doebele's report on valorization in Bogota. We feel it is ready for comments by IDU, as requested by Arturo Madero during our visit of about a year ago, and have obtained clearance to this effect from the Colombia loan officer and from Urban Projects.

Fortunately, Ricardo Paredes is in Bogota until about August 15. As indicated in the enclosed letter, we have sent copies to him to take to Jaime Gomez, Madero's successor at IDU and, if judged appropriate by IDU, to the other agencies of greatest help during our visit. We feel that our conclusions will be greeted positively by IDU since a major finding is that Colombia is far advanced in valorization techniques, using methods of great potential interest for other countries. We wanted nevertheless to protect their desire to comment on the report before it is more widely circulated. Any comments you have on the report will of course be welcome.

Hope all is well and not too hectic. Let's keep in touch.

Best regards,

Orville F. Grimes, Jr.
Urban and Regional Economics Division
Development Economics Department

OFGrimes:mah

Land Chron

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

July 22, 1975

Mr. Luis Ricardo Paredes
Apartado Aereo 100002
Bogota, D. E.
Colombia

Dear Ricardo:

I hope you will have time to help us once more on the Valorizacion report. We are sending you separately six copies of a preliminary draft. As you know, IDU is sensitive about any reports on its activities and it is most important that we retain its goodwill and cooperation. We propose the following:

1) You should personally deliver three copies to:

Dr. Jaime Gomez
Sub-Director Financiero
Instituto de Desarrollo Urbano
Carrera 7a, No. 20-99
Bogota

You will recall that Dr. Arturo Madero was designated by IDU to work with us. He has now been replaced by Dr. Gomez, but we are maintaining the same point of contact.

2) We are sorry that it is not possible to have a version available in Spanish, but please explain to him that Bank documents of this sort are normally in English to assure wider circulation. If your time permits, you may offer to give oral translations of specific sections to members of IDU who do not read English, if Dr. Gomez believes it would be helpful to do so.

3) Please also tell Dr. Gomez that we would like to obtain reactions from Dr. Daniel Rueda and others in EAAB, and from the new Director of Planeacion Distrital. We do not, however, wish to place copies in their hands before IDU has had an opportunity to review the report.

Therefore, please ask Dr. Gomez if he could, within one week, review the report sufficiently to authorize you to deliver it to EAAB and Planeacion Distrital. Point out that he and his staff will probably want

more time to make detailed comments and criticisms later, but that we would like this preliminary approval as soon as possible. (We think it is important for you to personally deliver copies to the other two agencies and to field any initial reactions they may have before you leave Colombia.)

4) If your time permits, you should follow up with Dr. Gomez, not only to get his permission to deliver to EAAB and P.D., but handle as many comments and criticisms personally as you are able before you leave the country. You can obviously disclaim all responsibility for the report's contents, but it would be much better for us to have the tenor of their reactions from you than in a cold written form.

Given the shortness of time, however, there are obviously limits on what you can do.

5) You may be asked the following questions:

A. What is the "Bahl and Linn report" used as a reference? This is a major World Bank study of public finance in major cities in many developing countries (including Bogota). It is still in draft form, but will also be circulated to appropriate officials in Bogota before circulation.

B. What is the "Grimes report"? Please explain that the Bogota study of Valorization is one part of a global study of methods being used to recover "plusvalía." A condensed version of which will, in fact, be one of the important chapters in a book now being prepared to assist other countries who wish to follow successful experiences in this field. The references to "land readjustment in South Korea," to France, and to Sweden, are also part of this study. Our worldwide research has shown Colombia is clearly the global leader in valorization, and as such is a highly useful example for other countries. For this reason, it is important that our account is as accurate and complete as possible.

C. Why haven't Annexes A, B and C, and the Maps been included? These were too bulky to send, and are all available at IDU. If there are any other references which are unclear, please say that I will be glad to respond to any requests for further elaboration.

Sincerely,

Orville F. Grimes, Jr.
Urban and Regional Economics Division
Development Economics Department

OFGrimes:mah

Research Sec

October 16, 1975

Prof. Michael Latham
Medical Research Centre
P.O. Box 49370
Nairobi, Kenya

Dear Michael:

Several Bank staff members have had an opportunity to comment on your ascaris research proposal. In the process, we stumbled upon the fact that discussions were also under way between you and Samir Basta and others here about iron deficiency research work you might be undertaking during your sabbatical year in Kenya. Given the modest size of the ascaris proposal, Samir and I agree that it would be sensible to incorporate this as a component of the research proposal that you currently are preparing for him. This will put the ascaris problem in a broader perspective, and also make it more manageable from a Bank processing point of view.

Sincerely yours,

Alan Berg
Senior Nutrition Advisor

cc: Mr. Samir Basta

AB

ABerg/lgl

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

Files

# OFFICE MEMORANDUM

Research yellow file

TO: Mr. Orville F. Grimes, Jr., VPD

DATE: October 16, 1975.

FROM: Herman van der Tak, Chairman of Review Panel

SUBJECT: Panel Review of Narangwal Population and Nutrition Research Proposal
Recommendation to Research Committee

1. On October 10, a panel consisting of Messrs. H. van der Tak (Chairman), G. Baldwin, C. Koch-Weser, S. Reutlinger and J. Wall (for Mr. W. Gilmartin) reviewed this proposal. Messrs. J. Duloy, K. Kanagaratnam and M. Selowsky had commented on the proposal beforehand. The originators of the research proposal were represented by Professor Carl Taylor (Johns Hopkins University), and Messrs. T. King, D. Chernichovsky and R. Faruqee (IBRD).

2. There was general agreement that the collected data-set provides a unique opportunity to explore a number of questions which are of key importance to the Bank's population, health and nutrition work. In particular, criteria for the design of service delivery systems can be derived from the large quantity of longitudinal research data on household events and delivery functions performed. The effort already spent on the project shows promise for early research results and high marginal returns on the Bank's inputs.

3. However, it was also agreed that the submitted proposal left a number of issues unclear as to exact scope, primary focus and main priorities of the intended research. The proposal presents broad objectives and conceptual frameworks for analysis of general interrelationships on the one hand and a large number of specific sub-systems and variables to be analyzed (on a one to one basis) on the other but somehow fails to formulate and list the questions to be explored in a self-contained, policy-related way. Further, the wealth of proposed analyses is based on what can be done with the available data rather than what can be accomplished with the limited resources to be provided by the Bank. The proposal states the need for selectivity and gives four main areas of research but does not identify more detailed lists and sets of questions which would receive priority attention. It was concluded that the additional step of presenting a short list of broader, policy-relevant questions would clarify the proposal and its priorities, and sharpen its operational focus.

4. Finally, it was stated that the proposed budget lacks comprehensiveness. It should give total cost and phasing of the project, and specify total man-months to be allocated by Johns Hopkins and Bank staff as well as cash inputs to be provided by the respective sponsors.

5. Mr. King has subsequently prepared the attached note, which goes some way towards clarification of the proposal.

6. The panel recommends to the Research Committee to approve the Narangwal Research Proposal. The Chairman further recommends that the sponsors be asked to prepare in, say, three months a fuller account of the operationally relevant questions the study will address; and that the progress of the study be reviewed after, say, one year.

Cleared with and cc: Panel members
cc: Messrs. A. Berg, D. Chernichovsky, J. Duloy, R. Faruqee, K. Kanagaratnam, T. King, M. Selowsky.

CKW:fro

Research gen

Mr. C. Koch[illegible]-Weser, VPSCH

October 15, 1975

William Gilmartin, ASNVP

Narangwal Population and Nutrition Research Proposal

This is to record my concurrence with version two of the panel recommendation to the Research Committee. This is done with recognition that the answer of Mr. King to question five suggests that not much can be expected from the Narangwal data with regard to "Child Survival Hypothesis".

WGilmartin:mp

Research gen

Research Committee Members October 15, 1975

Orville F. Grimes, Jr., VPD

Meeting on October 23, 1975

This volume contains material for the meeting of the Research Committee on Thursday, October 23, 1975 at 3:00 p.m. in Room E 1201/1. If necessary, the Committee will meet again on Thursday, October 30 at the same time and place.

The agenda for this meeting is

1) The two research proposals
2) Requests for supplemental authorizations
3) Education Strategy Research paper
4) Any other business

The papers for the meeting are in the following sections:

i) Budget Tables - financial information concerning research proposals, forthcoming proposals and ongoing research projects.
ii) Research Proposals - the research proposals and panel recommendations.
iii) Supplementary Requests - requests for additional funding under existing research projects.
iv) Forthcoming Proposals
v) Completion Reports
vi) Miscellaneous
   (a) Evaluation
   (b) Proposal for a Research Strategy and Program in Education.

/1 Please note that one item needed for this meeting is to be found in the Black Book distributed prior to the previous meeting (July 3, 1975). This is the Proposal for a Research Strategy and Program in Education - see Miscellaneous sections of this and the previous Black Books.

Distribution:

Messrs. Chenery, Balassa, B. de Vries, Karaosmanoglu, B. B. King, Lerdau, Schulmann, Thalwitz, van der Tak, Vergin, Waelbroeck, Yudelman

OFGrimes:gm

Mr. Heinz Vergin, AEP October 14, 1975

Benjamin B. King, VPD

Proposed Storage Research in the Philippines

1. I am not too enthusiastic about the Dichter proposal - yet. In the first place, it is country-specific. That is not necessarily against it, if it can be shown to be a prototype or have wider implications in some way than just an enquiry in one country.

2. What bothers me more than this is the extraordinary persistence of the "serious grain storage problem" at the village level. The figure of 25% crops up again in Africa; for example, it is quoted in Uma Lele's Design of Rural Development (p. 118). But that, if the index is correct, is the only reference. What are our rural development projects doing about it? Is there any experience? Have any other investigations of the Dichter type been carried out? If so, what happened to them?

3. This subject has been talked about for a long time. Are we really starting from scratch? I would be interested in Monty Yudelman's comments.

4. I have lent my copy to Ardy Stoutjesdijk, who is interested in a research project in East Africa, involving grain storage - but not, I think, at the grass-roots level.

cc: Messrs. Stoutjesdijk
Grimes

BBKing:gm

Research gen

Mr. B. B. King October 14, 1975

E. Lerdau

THAILAND : Income Distribution Project

1. A panel consisting of Messrs. Hinkle, Yenal, Greene and myself met with Miss Chiswick and Messrs. Ahluwalia and Pyatt on October 8. Mr. Grimes was also present.

2. The Panel agreed, without dissent, to recommend the Project for the Research Committee's approval. The Panel noted that this project might be considered the last - or almost the last - of a set of first generation projects in DRC's work on income distribution. DRC had conceived this phase in its work on this subject primarily as learning what the available data showed; from this set an overview on the whole subject would eventually be produced before a second generation of projects - no longer data surveys - would emerge.

3. The Panel was favorably impressed by the suggestion of the Regional Programs Department that a Phase II should eventually follow, but endorsed the present project on the understanding that (a) Phase II was not needed to justify Phase I, (b) a decision on Phase II would have to depend on the success of Phase I, and (c) DRC was not committed to Phase II even if Phase I was successful.

cc: Messrs. Yenal
Greene
Hinkle

ELerdau:jd

FORM NO. 75
(7-73)

WORLD BANK GROL

| ROUTING SLIP | DATE October 14, 1975 |
|---|---|

| NAME | ROOM NO. |
|---|---|
| Mr. B. B. King | |
| | |
| | |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

MARKS

For clearance.

Regarding proposal file

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| J. H. Duloy | N 234 | 5601 |

D R A F T
JHDuloy/vec
October 14/75

Dear Mr. Roemer,

Roger Norton has shown me your letter of 10/6 to him, concerning the research proposal you intend to launch. Let me say at the outset how pleased I was to see HIID emerge from the experience of DAS. I hope that research on development will flourish under the new institution.

I regret however that I am unable to respond positively to your request for research support. You should understand that the Bank has only a small budget allocation for research and that it does not act as a foundation financing research. ~~(If it has appeared to do so in the past, this was a mistake)~~. It is, however, concerned to carry out research as it bears upon its operations, interpreted broadly to include its policy dialogues with member governments, and to encourage the development of a research capacity in poor countries. The Bank, however, does draw upon the research capacity of rich country institutions as and when it encounters problems requiring special expertise. This reflects the Bank's role as a "user" of research, and is quite different from the functions of a foundation.

I have responded in general terms to your particular request to make clear the Bank position on contracted research. This, of course, in no way precludes our exchanging papers on research, sharing data, and cooperating on common objectives. For your information, I attach a brochure we have recently had printed which describes the activities of the DRC. I assume that you already receive issues of World Bank Research Program and the Catalog.

With best wishes,

Yours sincerely,

John H. Duloy

cc: Mr. B.B. King (cleared with) w/copy of Roemer proposal
DRC senior staff "

Research gen

October 13, 1975

Professor J.P.W.B. McAuslan
School of Law
University of Warwick
Coventry CV4 7AL
England

Dear Professor McAuslan:

I appreciate your interest in our work on land banking. At this juncture the final report is still some months into the future. Practically the sole reason for the delay in completing this research is the document you will find attached: the Policy Paper on Housing which, despite its brevity, took over a year to write. A further complication is that I transferred in September to the post of Secretary to the Bank's Research Committee. This will enable me to view the Bank's research efforts more comprehensively but will undoubtedly further retard the progress of our research on the operation of urban land markets in developing countries. So the best I can do at this point is enclose an earlier piece on land betterment, which formed the basis of the present research, and to ask your forbearance on the rest.

Although the Bank of necessity focuses chiefly on financial and economic aspects of urbanization in its project lending, legal and administrative complexities must be dealt with as well. Appraisal teams therefore occasionally include specialists with experience similar to your own to advise on project matters not handled by the Bank's Legal Department. So I have forwarded the information you sent to staff in the Transportation and Urban Projects Department responsible for Bank projects in East Africa, the Caribbean and elsewhere in the developing world. Also, curriculum vitae sent directly to Mr. Donald Strombom and/or Mr. R. Venkateswaran, the Division Chiefs responsible for urban projects, would save time and be useful to them.

Thank you again for writing. I may be in London for a few days in late January, but those plans are tentative - not to say tenuous. At the least, I hope we can keep in touch.

With best regards,

Sincerely yours,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

Attachment

OFGrimes:gm OG

Research Gen

October 13, 1975

Professor Nathaniel Lichfield
13 Chalcot Gardens
England Lane
London NW3 4YB
England

Dear Professor Lichfield:

One regret of my busy summer was that little time was available to discuss the research proposal on metropolitan growth which Chris Turner very effectively helped us to prepare. On the other hand, my present assignment will afford a wider perspective on Bank research in all fields and leave a bit of room to continue research on land, so there is benefit in that.

My main comment on the land policy research proposal is identical to the point you make on page 3: a comprehensive study of land policy requirements for effective urban planning is long overdue. Partisan debate in Britain and elsewhere has influenced land issues to the extent that, while the newest measures have many potentially positive elements, they also give rise to a distinct feeling of "here we go again." This makes yourstudy all the more relevant and timely.

On measuring the effectiveness of land policy measures, a possibility would be to gauge whether measures attain given targets and also whether the targets themselves are attainable simultaneously. Tax measures in particular often have both welfare and efficiency objectives, the former predominating in discussions of unearned increment, social equity and the like. Yet when these taxes are given a retrospective look, it is often the revenue yield which forms the chief basis for judging performance: the 1967 Act earned only £X million of the £80 million expected. I suspect this has a great deal to do with the ready availability of revenue data compared with other measures of performance. Gauging the impact of a land tax on land values is far more difficult, yet vital since depressing land price inflation may be a declared or implied objective of the tax which could be inconsistent with other objectives.

Thank you for sending your Working Paper No. 2 I hope we can continue to keep in touch as our research progresses.

With best regards,

Sincerely yours,

Orville F. Grimes, Jr.
Secretary to the
Research Committee
Development Policy

OFGrimes:gm OG

Research Jan

Mr. W. Gilmartin, ASNVP

October 13, 1975

John Wall, ASADB

Narangwal Research Proposal - Staff Panel Discussion

1. The discussion of the proposal centered on what questions were to be asked by the analysis. This, of course, is an issue prior to but intrinsic in asking if the data is suitable to answer the questions. Bank staff members have discussed with the faculty of John Hopkins just what data is available for analysis and what form it is in and have drawn up the lists of broad relationships to be examined and specific tasks to be done based on data availability. However, Mr. van der Tak and others found the lists either too broad or too narrow to know just what analysis will be done and how whatever is done will have relevance to the Bank. Mr. van der Tak asked that the questions to be asked be clarified and priorities among them be set prior to submission of the proposal to the Research Committee.

2. There was also some discussion of budgetary matters and several members expressed their confusion over the budget as presented. Mr. van der Tak asked that these matters be clarified prior to Committee presentation as well.

cc: Mr. Alisbah
JWall:is

Research file

Mr. R. Gulhati, ECDDR

October 9, 1975

Benjamin B. King, VPD Signed B. B. King

Non-RPO Research

I attach:

(i) A copy of Jack Duloy's response, which is about what we want.

(ii) My memo of March 25, 1975, which was rejected in favor of an informal note from the departments which was promised faithfully!

I would much appreciate it if something could be supplied by October 24, even if it is quick and dirty.

Attachments

BBKing:gm

Annual report to file

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

# OFFICE MEMORANDUM

TO: Mr. B.B. King

DATE: October 6, 1975

FROM: John H. Duloy

SUBJECT: Non-RPO Research

Non-RPO research in DRC is concentrated in the area of measurement and analysis of income distribution and poverty measurement and data. The aim is to develop a better understanding of these issues within DRC for subsequent application in the three data-intensive RPO's: the ECLA, ECIEL and ESCAP projects. During FY76, I forecast about 10 m.m.* The following is a list of the major reports generated by this work:

N.C. Kakwani and N. Podder, "Efficient Estimation of the Lorenz Curve and Associated Inequality Measures from Grouped Observations," October 1974 (Discussion Paper No. 10)

N.C. Kakwani, "Applications of Lorenz Curves in Economic Analysis," August 1975 (Discussion Paper No. 12)

N.C. Kakwani, "Measurement of Poverty and Negative-Income Tax," August 1975 (Discussion Paper No. 13)

N.C. Kakwani, "On the Estimation of Income Inequality Measures from Grouped Observations," Review of Economic Studies, forthcoming.

* orally: FY 75: about 6 m.m.

Mr. Hollis B. Chenery, VP - VPD

March 25, 1975

B. B. King, VPD

Information for Executive Directors:
Bank Research

1. Mr. Damry's memorandum of February 14 raises the question of "in-house" research in the 1976 annual report. In answering this, two points of clarification appear to be in order.

2. The first is that the bulk of "in-house" research is, in fact, an integral part of the so-called external research program, in one form or another. A rough breakdown of staff time on all research in DPS/CPS (FY74) would be as follows:

| | Percent |
|---|---|
| RPO and RPO preparation | 75 |
| Commodities Division 1/ | 5 |
| Other in-house research | 20 |
| | 100 |

I do not think that this point is sufficiently understood. It may well be a good idea to bring it out into the open.

3. The second point is that, if the object is to have a comprehensive view of all research being, in some sense, initiated by the Bank (whether included in the annual report or not), then there are two other sorts of research which deserve consideration. One of them is certainly as important as the "other" in house research. Maybe the other is too. They are:

(a) Research financed through departmental or other consultants' budgets.

(b) Research financed under loans and credits.

4. On research financed by hiring consultants outside the regular external research program, we know practically nothing. Our suspicion would be that much of the expenditure of this type is linked to the "other in-house research" through common research projects. In other words, the real distinction is between RPO and other research. Both use staff-time and consultants.

1/ Listed separately because it is a fairly well-defined category.

5. As you are aware, we have gradually been collecting information on research financed under loans and credits. We have circulated our preliminary list for FY74 and I believe we have now received all the comments we are likely to get. We still have a fair amount of work to do in order to extend this activity to current projects and to projects before FY75. In the meantime, Mr. van der Tak and myself will be preparing a note on the administrative arrangement that may appear necessary to exercise better control over research of this kind. We believe that this is a necessary first step to smoke out the issues, if any, before thinking of embarking on a policy paper.

Information System for Other In-house Research

6. The principal source of information on staff time is, of course, the Time Reporting System. For DPS there are three codes: RES 01 for RPO research; RES 02 for RPO preparation; and RES 03 for all other research. CPS does not have this classification. Although we are mainly concerned in this context with the third of these, a few comments are in order for the first two.

7. The first code identifies not only the fact that time was spent on RPO research, but also the particular RPO project involved. In principle, therefore, the time spent in house on any RPO project can be identified. However, we also get parallel information from status reports on RPO projects. We have noticed that there are discrepancies between the status reports and the TRS system. In FY74, for example, the TRS suggests a figure of not much more than two man-years of external research for CPS, while the status reports suggest something closer to ten man-years. If P & B carries out some sort of audit of the way the TRS system is working, this is one point they may wish to include.

8. The second code does not identify the RPO project, because the project number is not known at the time. RPO preparation accounts for a sizeable proportion (15-20%) of all in-house research, but I do not think it makes any sense to carry this identification any further. However, as noted, CPS does not use this particular code. Again, steps might be initiated by P & B to ensure Bank-wide consistency.

9. This brings me to the main problem, the identification of the remaining research, which in FY74 took something of the order of 15-20 man-years (depending on the conversion factor from man-months). At the moment, this is simply an amorphous total, which one can only break down by division.

It is obvious that breakdown by project can only be done by instituting a sub-code system similar to the RPO numbers which would identify the specific projects being undertaken. It is equally obvious that one must have some "stop-loss" minimum size in order to identify only the major activities and to prevent total submergence in paperwork. As a corollary, a description of such projects would be forwarded by the departments to the front offices of CPS or DPS, as the case might be, at the time of initiation of the project and at the time of completion. Task forces (e.g. Energy, Urban Poverty) would be treated as single projects.

10. Specifically, the following steps would be required. I am only indicating the procedure in the DPS. Presumably a parallel system would be required in the CPS.

i) P & B would assign an individual sub-code series to each department which each department would assign to its own in-house (or non-RPO) research projects.

ii) Whenever a department decides to initiate a research project requiring more than three man-months or, say, $20,000 of consultant fees (these figures are, of course, negotiable), it would (a) assign that project a number in its own series and (b) instruct the relevant division to use that number in the TRS and (c) send a brief project description to you (with copies to Mr. Stern and myself) including the names of those involved.

iii) When the project was completed, a brief completion report would similarly be sent, together with a list of the resulting documents.

iv) In the Annual Report, the completion reports would be used at the appropriate place (by subject) in the equivalent to this year's Section III. I do not think "in-house research" would merit a separate section, since, as already explained, it is a misnomer.

Bureaucratic Cost

11. While, at first glance, these suggestions seem like another heavy-handed addition to the Bank's procedures, I am not sure that it is quite as bad as it looks. Most of

the procedures are in being and it simply means extending the coverage. The number of projects is not likely to be very large. The attached list of DED studies shows that there are under 20 "internal" ones and a number of these might well not qualify.

Document Identification

12. While the suggestions made in my memorandum of February 26 regarding the creation of divisional document series do not depend on this system nor vice versa, there is some merit in consideration and introduction of the two processes at the same time.

Consideration of the Proposal

13. If you are broadly speaking in agreement with this approach, the subject might be discussed at a Directors' Meeting in DPS. I would also contact CPS to obtain their reaction.

Attachment

cc: Messrs. Stern
van der Tak
Schulmann
John King
D. C. Rao

BBKing:gm

DED Studies

| | Current (i.e. FY75) | | Proposed for FY76 | |
|---|---|---|---|---|
| | RPO | Internal | RPO | Internal |
| Front Office | 3 | 0 | 0 | 0 |
| Industry | 4 | 4 | 4 | 3 |
| Urban | 6 | 5 | 1 | 3 |
| Population | 6 | 4 | 3 | 6 |
| Rural Development | 6 | 4 | 2 | 3 |
| Finance | 2 | 3 | 2 | 2 |
| | 27 | 20 | 12 | 17 |

Source: Research in Development Economics Department, February 11, 1975.

March 25, 1975

FORM C.75
(7-73)

WORLD BANK GROUP

| ROUTING SLIP | DATE Oct.9, 1975 |
|---|---|

| NAME | ROOM NO. |
|---|---|
| ~~Mr. B.B. King~~ | ~~F 1233~~ |
| (1) A. Strutjesdijk | |
| (2) B. King. | |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

REMARKS

Could you please take a look at the attached and let me know whether it would be suitable for funding as an IBRD research project. The 'asking' price is shown in the attached draft budget. I have sent a copy to Mr. Yudelman for his comments. I also attach a copy for Mr. Grimes.

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| Heinz Vergin | A 607 | 4281 |

ANNEX 2

## PROPOSED SUPPORTING BUDGET

| | | | |
|---|---|---|---|
| I. | Honorarium for Coordinator of Pre-Workshop Survey and Filippino Counterpart - | | |
| | A. Six months at $2,000/month | $12,000 | |
| | B. Six months at $ 800/month | 4,800 | |
| | C. Fringe Benefits - Based on 15% of salary; includes health and accident insurance, social security benefits, etc. | 2,520 | |
| | Sub-total | $19,320 | $19,320 |
| II. | Transportation & Per Diem - | | |
| | A. Two round trips - Washington/ Manila/Washington | $ 3,000 | |
| | B. Air travel within the Philippines (includes 5 round trips, Manila/Davao/Manila) | 1,000 | |
| | C. Ground transportation and vehical hire, etc. | 500 | |
| | D. Per Diem for coordinator at $10.00/day x 183 days (indludes food, housing, etc.) | 1,830 | |
| | | $ 6,330 | $ 6,330 |
| III. | Miseclaneous and Unforseen Expenses - | | $ 500 |
| IV. | Administrative Overhead - | | |
| | Based on 20% of total program costs; includes secretarial assistance, rent and utilities, accounting expenses, program monitoring time, etc. | | $ 5,230 |
| | GRAND TOTAL | | $31,380 |

**DAVID DICHTER & Associates**
Consultants,
Development Assistance Programmes
Address - 9, rue de Vermont
1202 Geneva, Switzerland
Cable address *Selfhelp-Geneva*
Tel. (022) 34 99 33

October 7, 1975

Mr. Heinz Vergin
Assistant Director
East Asia & Pacific
Projects Department
IBRD
1818 H Street, N.W.
Washington, D. C. 20433

Dear Heinz:

To follow up on our recent discussion, I should like to submit for your consideration a research proposal which has as its principal aim a detailed analysis of local grain storage practices and problems encountered in the Philippines. Although this study would seek to investigate local storage systems for all the main food and feed grains in the Philippines, it would concentrate its attention on problems associated with the storage of maize (corn) in the southern part of the country, i.e. Mindinao, Panay, Cebu, etc.

This study will not only try to identify the principal environmental factors responsible for the serious grain storage problem in the Philippines, especially as it affects low-income farmers in that country, but also take into account the available resources and technology capable of effectively dealing with the matter. The ultimate intention of this study, however, is to lay the groundwork for convening a NATIONAL WORKSHOP/TRAINING COURSE IN THE PHILIPPINES DEALING WITH IMPROVED FARM AND VILLAGE-LEVEL GRAIN STORAGE METHODS, which will provide the necessary guidelines for establishing a national storage program.

It is estimated that Filippino subsistence farmers lose anywhere from 25% to 40% of their harvested grain due to damage caused by insects, rodents, and mold. In light of the critical food shortages during the past several years, particularly in certain areas of the south, it is surprising that more attention has not been given to this problem. The reasons for this neglect are not hard to find. As in many other developing countries, the international aid programmes and the governmental extension service concentrate either on improving the volume and means of production or on introducing new systems of marketing and distribution of grain. It is in the middle -- between harvest and sale (or harvest and consumption) -- that the high losses occur to the individual farmer's grain. Keeping in mind that an estimated 80% of the average Filippino subsistence farmer's grain crop is kept at the village-level for seed or consumption, the effect on his food supplies of a 25%-40% loss becomes even more critical!

It was quite evident in the course of my recent visit to the Philippines, on behalf of the Bank, that there is considerable interest and support at both the national and local levels for trying to reduce on-farm and village-level grain losses through improved means of storage. The Filippinos I talked to last January were aware that the level of technology necessary to significantly cut local grain storage losses is both available and readily adaptable to the needs of low-income farmers in their country. And they were anxious to do something about it!

It is worth noting here that every effort will be made to carry out our investigations in cooperation with faculty and research personnel from the Agricultural Engineering Dept. of the University of the Philippines (Los Banos). In this connection we expect to engage the services of a full-time Filippino counterpart , for which funds have been allocated in the budget. Furthermore, all planning done in preparation for the forthcoming NATIONAL WORKSHOP/TRAINING COURSE will involve both the University of the Philippines and the Philippines Ministry of Agriculture Extension Service.

I have also taken the liberty of enclosing for your information, Heinz, a proposed budget in support of our efforts to carry out the pre-workshop investigative phase of the programme. Please do not hesitate to contact me should you feel you require any additional information at this time.

Sincerely,

David Dichter

David Dichter

DD/bp

# PROPOSAL FOR PRE-WORKSHOP INVESTIGATION OF ON-FARM AND VILLAGE-LEVEL GRAIN STORAGE PRACTICES AND PROBLEMS ENCOUNTERED IN THE PHILIPPINES

Submitted by:

DAVID DICHTER & ASSOCIATES

9 rue de Vermont
1202 Geneva, SWITZERLAND

## I. ASSESSMENT OF THE PROBLEM -

The initial phase in the planning of a project to improve on-farm and village-level grain storage technology in the Philippines aims at an analysis of the problem from the point of view of the farmer in the particular locality to be served. He is the key figure. Any successful program must be based upon realities as seen by the individual farmer storing his grain.

In the southern part of the Philippines, the traditional corn-growing farmer lives in a small village and annually cultivates about 3 hectares (7 1/2 acres) by hand. His annual field (with an average of two growing seasons) is estimated to be around 600-800 kg./hectare or a total of 1,800 - 2,400 kg. This is classic subsistence farming, probably not unlike that of most corn-growing farmers in many other developing countries.

A. Traditional Storage Methods - Before any consideration, choice, and planning of an improved storage programme, it is necessary to analyse local traditional methods in order to (1) understand their shortcomings and therefore the need for improved techniques and, (2) determine possible simple, yet effective, needed improvements. Certainly, minor and effective changes of existing methods of storage are easier to popularise than the introduction of complex and costly new alternatives. For example, improved sealing of traditional granaries or a broad-based programme of insecticide treatment could perhaps have significant immediate effects.
At any rate, the important point is to consider first the traditional methods of storage from the Filippino farmer's viewpoint, asking questions such as: Does he find that the traditional methods are inefficient? Does the rapid rate of insect multiplication make it

impossible for him to store grain over a long period of time with his traditional method? Does mold growth and rotting present problems? What about rodents and birds? How much grain does he actually lose with his traditional methods of storage?

B. Market Price Realities - The economies, that is, the practical benefits of new method, must be thought through from the Filippino farmer's standpoint, or, it may fail to be accepted because of simple economic realities. It is a matter of fact that subsistence farmers in most developing countries will not be inclined to change their traditional storage methods unless they receive sufficient financial returns from whatever additional labor, time or cash inputs are required by the improved storage techniques. Therefore, the economics of the improved techniques as they affect Filippino subsistence farmers must be carefully studied.

Thus, local market price information from various regions of the Philippines is needed. Furthermore, the price of grain at harvest time and at the yearly high and whether Filippino farmers have large financial demands at harvest time also require investigation as do the spending habits of Filippino subsistence farmers and their ability to hold back their grain until prices have started to reach their seasonal high. One must ask such important questions as: How much fluctuation is there in the price on the local market? Are there other more lucrative markets the local farmer can reach more easily? Is transportation of his crops to the market expensive or impractical?

There are other economic and market factors to consider. For example, in many developing countries, grain is traditionally sold in markets by volume rather than by weight. This factor could work against the adoption of improved local storage methods. The improved quality of well-stored grain, for instance, could bring few benefits if the farmer not using improved methods can mix a large proportion of his damaged corn with good grain and thus sell it at the same price as well-stored grain.
Similarly, are grain prices in the Philippines keeping pace with inflationary price rises in the cost of the new storage techniques? Also, increased transportation prices, for example, can reduce potential proftis.

C. Social Customs and Traditions - Similarly, local customs and traditions would have to be studied from the Filippino farmer's viewpoint to determine the impact of the introduction of a particular new storage technique. If farmers are used to leaving their maize unhusked during storage, (incorrectly believing that the husk protects the grain) will they resist change in this regard? The use of insecticides would also require careful planning. Will insecticide-treated grain have a changed taste or odor? Will the treated grain be acceptable to the Filippino farmer for his own consumption? Will it be acceptable for sale locally? Have there been any previous bad experiences in the locality as a result of the misuse of insecticides?

Another example of the importance of studying social customs would be to try to understand the Filippino farmer's attitude toward centralization of storage facilities. Does the subsistence farmer in Mindinao, for example, traditionally build a granary in his field and leave the crops stored there until needed? Would a central storage silo cause him transportation problems? Would he resist cooperative storing because he would not want his neighbor to know how much he has produced? Any of these social factors - singly or combined - could greatly influence the success of a new farm and village-level grain storage program.

Having analysed the problems from the point of view of the individual subsistence farmer, the investigator would seek to determine the scope of the program to be introduced and also to what extent it could be supported by the Government of the Philippines and outside technical assistance and international funding agencies.

D. Personnel Considerations - It is clear that the adoption of a program aimed at improving farm and village-level grain storage methods on a national or even regional scale in the Philippines will require the services of considerable personnel. The scope of this study will therefore include: (1) an analysis of the manpower requirements for such a program, (2) the ability of various Filippino agencies currently working in this field to respond to these needs, and (3) the type of training the additional personnel needed, the role they will play, and the various ways and means for coordinating their activities will also be studied.

E. Availability of Material - The supply of the necessary building materials for a national farm and village-level grain storage program must be assured as well. A study in this regard must therefore try to determine to what extent cement, insecticides, tin, sheeting, reinforcing rods, sand, screening material, and wood, etc. are all readily available and for what price, and to what extent these vitally needed materials are influenced by various outside forces, i.e. regional or world storages, inflation, etc. Another question to be examined here is who will be ultimately responsible for assuring the supply of these needed materials? Experience has shown that lack of critical items when needed will quickly undermine a subsistence farmer's confidence in the program.

F. Commercialization - Events in several developing countries have shown that marketing success of grain stored using improved methods will influence the rapidity with which those methods are accepted. For example, if local market prices do not fluctuate as greatly as those in urban centers, the sponsoring agency may want to consider the planning and support of organized transportation for commercialization. An improved storage program might well consider the available means of commercialization and look for improvements to enhance the value of the improved storage techniques. For example, the sponsoring agency in the Philippines may want to reward farmers for the improved quality of their grain by introducing some system of quality grading or sale by weight to help popularize their techniques.

## II. CHOICE OF THE IMPROVED METHOD OF POPULARIZE -

The decision to adopt certain methods of improved grain storage for popularization in the Philippines should result from a careful analysis of the existing problems. In dealing with subsistence-level Filippino farmers with very limited cash resources one must carefully measure the total cost of construction, repair, and utilization of a new technique against the effectiveness and practical benefit to the farmer. Although this type of calculation generally requires time for both study and analysis of the new method, it is felt that the proposed study paper can provide helpful guidelines as far as the methodology is concerned and also some indication of the various types of storage containers which might lend themselves for testing in the Philippines.

A. Scientific Testing - The importance of scientific testing before introducing the new storage technique to the farmer cannot be over estimated as it can present many problems. Clearly scientific testing lends authenticity and permits the sponsoring agency to prove to the local farmers the improved reliability and efficiency of these new methods. Accordingly, every effort will be made to analyse existing data on different types of grain storage structures which are considered suitable for the Filippino environment. This will include a review of material on grain storage trials conducted in the Philippines, collected by the International Rice Institute and Agricultural Engineering Dept. of the University of the Philippines at Los Banos.

B. Field Experience - Less formal but equally revealing is field experimentation. Since field trials can help to verify the adaptability of local materials as substitutes for more obvious but costly imported materials, special attention will be devoted to this subject, especially as it relates to the organization of the National Workshop/Training Course. The subject of field tests will be introduced in order to uncover hidden problems and anticipated social impediments, and also indicate the level of farmer interest in the proposed new technique. An effort will be made here to try to determine how government extension agents can conduct useful field experimentation in this area based on knowledge gained from a similar program conducted in West Africa under similar climactic and humidity conditions.

The study paper will attempt to illustrate how field experiments can be organized for the benefit of Filippino subsistence farmers in order to avoid false impressions and to permit adjustments to the program. It is felt that once this is done, valuable information can be gained relating to such additional questions as:

1. How much training time and supervision is necessary to assure proper construction and/or proper use of these storage containers?
2. Can the farmer maintain the technique himself?
3. Are special tools required?

4. Will the existing agricultural extension system support the new technique?

The final choice of a particular storage method to popularize will therefore be made based on many factors previously discussed in the context of local conditions.

III. METHODS OF FINANCING THE INTRODUCTION OF NEW STORAGE TECHNIQUES -

One of the principal objectives of this study paper will be an analysis of the financial aspects of implementing a Philippine national program of improved grain storage practices at the farm and village level. There are several types of financing available from which to choose among which are:

1. Direct cash investment by the participating farmer
2. Credit financing
3. Price supports
4. Grants

A. Direct Cash Investment by Participating Farmer - Cash payment for any improved storage technique is the simplest and most direct method of financing. It requires a minimum of administrative, financial and coordinating burdens for the sponsoring agency. Furthermore, cash programs using the personal financial resources of the farmer can be the method of financing which gives the widest and fastest possible popularization of a program, providing that they are relatively inexpensive and accessible to small farmers. In developing countires like the Philippines where the average annual per capita income is more than $100.00, many improved methods of storage which are relatively low-cost are expected to be within

the means of the average Filippino subsistence farmer. In this case the modest cash requirements for such a program will aid its acceptability and speed the rate of its acceptance.
If the cost of the new technique is too high, the benefits derived from the improvements may be concentrated in the hands of farmers at the highest income levels or even with merchants and civil servants who are quick to see the monetary advantages of improved storage methods. Thus, other methods of financing will have to be considered if the average Filippino subsistence farmer is to participate in improved storage programs. Later, as a result of his use of improved methods, his increased income may permit him to assume more financial responsibility for additional improvements.

B. Credit Financing - It is expected that Credit Financing can increase the potential availability of improved storage methods to the low-income Filippino farmer.

1. Selection of Credit Recipients - If a project uses financial criteria similar to those used for bank loans, most small farmers in the Philippines will not usually have sufficient resources or collateral to merit credit. In order to make credit available to those who need it most without risking a low rate of repayment, it may be necessary to consider allowing repayment of loans in kind or make provisions for a commercialization program for the grain stored. Furthermore, it would be useful to determine whether a low-income farmer in the Philippines should be asked to show his degree of interest in the project beforehand, in order to participate in a credit program. This could

perhaps be done through the requirement of a cash advance or the supplying of specific materials or labor.

2. The System of Repayment of the Credit Loan - Experience in other developing countries has shown that the system of repayment of the credit loan should be well planned before the program begins. It is worth noting that provisions should be made for the eventuality that a certain proportion of the loans will not be repaid due, for example, to circumstances beyond the control of the low-income farmer, such as crop failure. The terms and requirements of the credit program must therefore be clearly explained to all farmer participants and to all extension personnel to assure that all parties concerned understand the responsibilities being assumed.

3. Price Supports - It will be well worthwhile determining within the scope of this study whether improved grain storage techniques can be financed by price support contributions from a sponsoring Filippino agency. This is a form of gift (but it is also) for the purpose of underwriting a program. For example, it might involve granting a portion of the cash value of construction materials or transportation expenses, the remainder being paid for by the interested farmer or cooperative.

   Price supports have been known to provide a valuable

alternative to cash and credit financing, especially when there are rapid increases in the prices of building materials or insecticides without equivalent increases in the prices that farmers receive for their produce. Price supports used in conjunction with a cash program are know to serve as a way of avoiding repayment problems inherent in credit, thus decreasing the administrative burdens of the program.

It has been seen that un-repayed credit becomes a gift. If a high percentage of reimbursement cannot be assured by a credit program, it might be better to consider distributing the available financial resources through the use of price supports. This would make it possible to extend the benefits of the program to more Filippino low-income farmers.

Accordingly, it can be forseen that a price support program, while limited by the resources available, has many of the advantages of a cash program. The project personnel are expected to have a smaller and less complicated administrative work-load to carry than they do in a credit program. Another advantage is that the interest of the low-income farmer is greatly assured by his cash participation.

4. Grants - Can provide a useful means for having programs quickly accepted by Filippino farmers; their scope is limited only by the financial capabilities of the granting agency. However, grants could present problems to the long term development of an improved grain storage program

in the Philippines. Once the project funds have been exhausted for grant financing, it may be difficult to convince farmers to pay their own money for what others have been given free.

In this case, there may be a lag in popularization while farmers wait to assure themselves that no further gifts will be forthcoming. There is still another potential problem that may result from the donation of a grant. When the investment by a farmer is minimal, his interest in the upkeep and proper use of the items received may also be minimal. It will probably have to be worked out in advance that if grants for the total cost of the storage method are to be given to farmer participants, a careful selection will have to be made of the recipients. Following this a thorough explanation will have to be given to those farmers selected for the program about the practical advantages and use of the new storage method(s), followed by continued close supervision in its proper use.

IV. STIMULATING INTEREST IN IMPROVED STORAGE METHODS - There are likely to be many methods for popularizing or stimulating new storage techniques in the Philippines. The manner in which this is done can directly affect the number of Filippino farmers who will choose to try the new techniques? This research paper will attempt to show how such a program should be

planned before commencing active popularization at the farmer-level. It is felt that such an investigation will help avoid early confusion and delays which often characterize new programs of this kind. It will also seek to explain how project field agents should be trained before they attempt to discuss these new methods with low-income Filippino farmers. Other points likely to be considered here include the ways and means for field testing the new storage containers (and dryers), various financial arrangements which should be agreed upon, and the extent to which transportation problems might be anticipated and resolved.

A. Demonstration Methods - Demonstration of improved storage methods have shown to be very effective in convincing low-income farmers in developing countries of adopting the new methods for themselves. Field demonstration models are known to attract quite a lot of attention, especially when they are highly visible, in locations where they are: (1) near the home of an individual farmer, (2) at farmer's cooperatives, (3) at agricultural youth clubs, (4) at agricultural expositions, and (5) on publicly owned land. Other important considerations likely to attract a Filippino farmers' attention are: Is the location easily seen? Is adequate, easily interpreted information provided? If it is built for an individual farmer, is he well-respected? Will he use the site? Are there local personnel available who can explain the methods? Will the site be attractive and well-maintained?

B. On Farm Demonstrations - Because of some traditional farmers' reluctance to adopt new methods, the initial demonstration units may

need to be built on a total gift or price supported basis, perhaps with a guarantee to reimburse any grain losses in the event of failure. Experience has shown that when the demonstration model is installed as a gift, recipients may have little stake in its success. Since the purpose of a demonstration container is to spread the knowledge of good results, special care should be taken that the construction sities are well chosen to reduce problems of mis-use or abandonment. It is a good idea that when selecting farmers for demonstration projects it be done with the aid of local Filippino agricultural extension agents or government authorities. Additionally, close supervision and careful explanation of storage techniques will help to assure good results and develop positive attitudes of acceptance.

C. Agricultural Expositions - The high visibility offered by agricultural fairs in the Philippines offers excellent opportunities for the display, explanation and discussion of demonstration models. An explanation in the local language by a farmer already convinced of the method through personal experience and success has been known to directly increase the impact of an agricultural fair demonstration. Follow-through is likely to increase by handing out simple flyers which briefly explain the storage methods and give names and addresses to contact for more detailed information and assistance.

D. Demonstration Sites on Public Lands - It has been found that sites near market places, health clinics or local agricultural offices

can be very effective demonstration locations. Since this type of site generally has no single owner or person responsible for its operation, assurance should be made in its planning to provide for continued and proper use because an unused storage unit can be a bad advertisement. This study paper will take into account the activities of local agricultural extension agents in helping increase the credibility and effectiveness of the program. The question of transporting interested farmers to a demonstration site to increase its impact will also be raised.

E. Use of Radio and Newspapers - To gain more widespread acceptance the use of agricultural radio programs and local newspapers will be discussed. Since these methods lack the visual impact and opportunity for questions provided by actual demonstration sites, explanations must be clearly and convincingly focused at the level of knowledge of the prospective users, preferably in the local language or with simple self-explanatory diagrams and pictures.

V. INTEGRATION INTO THE LOCAL INFRASTRUCTURE -

It is felt that grain storage program can have a more lasting and broader impact if it is closely integrated with agricultural extention services, farmers' organizations, local craftmen and the local marketing structure. Additionally, such integration can reduce the program's organizational and logistical responsibilities. For example, the study will seek to determine whether the management of insecticide supplies might be turned over to merchants' or farmers' organizations. Also the

question of whether craftsmen, once trained in storage construction skills, can take over further training through apprenticeship of younger craftsmen will be raised here.

The question of coordination with other related projects in order to extend the long-range effect of a grain storage project will be examined here. For example, a broader more effective base might be gained by joining forces with Filippino groups working in grain commercialization programs or improved production projects which encourage the use of fertilizers, improved seeds and/or animal traction. This type of coordination can provide complementary benefits for other development assistance groups working the the Philippines as well.

ANNEX 1

## OUTLINE OF SUBJECTS TO BE COVERED IN FIELD INVESTIGATION PHASE OF PHILIPPINE ASSIGNMENT

A. An analysis of storage practices and problems encountered in various Filippino localities*-

1. Technical storage factors -

   a. silo and dryer (if utilized) design

   b. drying methods employed

   c. insecticide usage and requirements

   d. local cost of insecticides

   e. insecticide delivery system including dangers, problems, as well as advantages, which are related to their use

   f. practical maintenance of hermetic storage containers

   g. improved shelling methods (as applied particularly to maize)

   h. analysis of temperature and relative humidity conditions

2. Availability of silo/dryer building materials -

3. Cost vs efficiency of various types of storage containers

4. Economic considerations -

   a. suitability of cooperatives

   b. suitability of guarantee loan funds

   c. influence of market price fluctuations

   d. function of middlemen

   e. government role

* With special reference to the principal maize-growing areas in the southern Philippines.

B. Socio/cultural factors involved in successfully introducing improved farm and village-level grain storage practices to various Filippino communities -

1. Attitudes of subsistence farmers

2. Role of village head men

3. Construction skills which can be successfully absorbed by village artizans, workers through on-the-job training courses.

C. Reporting on past as well as current on-farm and village-level grain storage projects -

D. Discussing future grain storage projects with the view to focusing public attention on this activity. The accent would be on the advantages to be derived from this form of technical assistance, especially at the level of the individual peasant farmer.

E. Passing on information relating to successful farm and village-level grain storage practices adopted by a certain locality.

F. Special problems associated with farm and village-level grain storage in the principal maize-growing regions of the Philippines.

1. Technical considerations

2. Suitability of various types of storage containers

3. Marketing factors

4. Cost vs efficiency of different types of silos in use in these regions.

5. Grain drying principles

6. Types of insecticides adaptable for "closed" and "open" storage systems: Liquid and powder form 'contact' insecticides, fumigant insecticides and their practical application in relation to hermetic storage conditions to bring on insect asphyxiation.

FORM NO. 75
(7-73)

WORLD BANK GROUP

| ROUTING SLIP | DATE 12/12/75 |
|---|---|

| NAME | ROOM NO. |
|---|---|
| Mr. Dubey | |
| | |
| | |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

MARKS

I sent this paper to you on November 19. Have you been able to review it? (It was supposed to be sent on to Darnell afterwards).

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| B. B. King | F1233 | 6001 |

FORM NO. 75
(7–73)

WORLD BANK GRO.

| ROUTING SLIP | DATE November 19, 1975 |
|---|---|

| NAME | ROOM NO. |
|---|---|
| 1 Messrs. Dubey | E723 |
| 2 Darnell | D830 |
| 3 B. King | F1233 |
| | |
| | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

REMARKS

Please indicate if of any interest and pass on.

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| B. B. King | F1233 | 6001 |

B. King

November 10,1975

Hollis:

Professor Khaldi's sketch (see attached draft) of agriculture productivity determinants in the Middle East looks promising but probably is too applied to survuve the basic research-oriented Economics Program competition. Would the Bank have any interest in it? Do you have any "marketing" suggestions for Khaldi -that is if you see potential merit in it but it fails to fit your needs ? For example,who in AID or USDA might have some programmatic interest ?

Thanks,and regards

Jim

Jim Blackman
National Science Foundation
632-5968

Please reply (by phone if you prefer)

BR

# AGRICULTURAL RESEARCH AND PRODUCTIVITY IN THE FERTILE CRESCENT AND EGYPT

A Research Proposal

by

Nabil Khaldi

## ABSTRACT

Measurement of changes in growth of agricultural productivity; and the identification of the factors which have determined productivity change in the provinces of Syria, Iraq, Jordan and Egypt will be studied for the period 1950-1975.

First, a total factor productivity measure, which implies an index of output per unit of total input will be derived and analysed. Sources of productivity gains due to improved quality of the factors of production, better knowledge, and better infrastructure and institutional arrangements will then be related to research, extension activities and education, as the main determinants of productivity growth.

Their contributions to productivity will be estimated utilizing time series data by province, which will be compiled and calculated for each of the respective countries under study.


## Background

Recent developments in agriculture have been characterized not only by increased use of resources, but also by increasing productivity. From the same set of inputs, farmers have been receiving increasing amounts of output.

Most studies of productivity growth in agriculture which point to a strong functional relationship between research and agricultural productivity have concentrated heavily on developed countries.[1]

A great number of agricultural productivity studies have failed to provide productivity indexes that take account of real productivity change - a shift in production function - due to change in factor proportions over time. This study will utilize a total factor - productivity measure as an indicator of real change in productivity. This measure implies an index of output per unit of total input, where the indexes of inputs and outputs are weighted by variable factor and output shares to reflect production function shifts. Total input growth rate is disaggregated into the contribution of traditional inputs; land, labor, and animal power, and of modern inputs; fertilizer, tractor and pumpset irrigation. The productivity growth rate is a residual - the difference between the growth rate in output and the growth rate in inputs.

In addition, recent studies by Griliches ( 3 ), Griliches and Jorgenson ( 4 ), and Denison ( 1 ) have shown that the typical measured productivity series contains systematic errors

---

[1] Most notable exception is Robert Evenson's work on India, where evidence provided implies that knowledge created by research is associated with the use of modern inputs and is therefore more effective in terms of yields in the districts where the use of these inputs is encountered ( 2 ).

which for the most part can be identified with factor qualities.

In light of these findings, productivity growth may be explained, if data are available to actually measure changes in various types of factor qualities, as in the case of labor skill which will result in a component of measured productivity change. However, a full explanation of productivity change would be impossible to attain for the countries covered in this study, since this requires obtaining data in sufficient detail to account for productivity changes that are identified with factor qualities. Alternatively, productivity components due to factor qualities, will be systematically related to agricultural research and extension activity. Accordingly, models for estimating the contribution of research and extension activities for the mentioned countries will be developed.

Scope and Nature of the Data

Time series data on agricultural output and inputs for the countries covered in this study will be used in the construction of the total productivity measure. Observations will be province and regional aggregates for the period 1950-1975. Further, the study will be utilizing a time series data on investment in research and extension activities, in addition to schooling attainment of farm population, as the main determinants of productivity changes in agriculture.

At present, a complete compilation of output and inputs data (province level) for each of the countries studied is not available.[2]

---

[2] I am including preliminary notes regarding output and input data on Syria, which was part of a research project funded by the N.S.F.

Concluding Remarks

The identification of sources of growth in agriculture, as well as the causes which bring about the actual productivity differentials between different regions, continues to be one of the bottlenecks in agricultural development for less developed countries.

In the Middle East, as in most regions of the world, except for the oil-rich countries, agriculture has been and will continue to be the mainstay of economic life. In each of the countries examined in the proposed study, no less than 50 percent of the total population depends on agriculture for their livelihood , and a substantial portion of the population are engaged in the processing and handling of agricultural products. Thus, it would hardly be possible to achieve sustainable economic progress apart from gains in agricultural productivity. It is hoped that the proposed study will provide a meaningful addition to the prospects for furthering our understanding of the factors determining the efficiency with which scarce resources are utilized to produce food.

## REFERENCES


1. Denison, E.F., "The Sources of Economic Growth in the United States and the Alternative Before Us", Committee for Economic Development, Washington, D.C. 1962.
2. Evenson, Robert E. and Yoav Kislev, Agricultural Research And Productivity Economic Growth Center, Yale University, Yale University Press, 1975.
3. Griliches, Zvi, "The Sources of Measured Productivity Growth, U.S. Agriculture, 1940-1960," Journal of Political Economy , Vol.LXXI, No.4, August, 1963, pp.331-346.
4. Grilizhes, Zvi and D.W. Jorgenson, "The Explanation of Productivity Change" Review of Economics and Statistics, Vol.XXXIV, No.99, 1952.

(Preliminary Report)

SYRIAN ARAB REPUBLIC

Statistical Appendix

Notes on calculations of data processes for output, inputs, and factor shares by Syrian province , 1950-1974.

A. At present, Syria is divided into the following Muhafazats (the Arabic equivalent of districts or provinces).

1). Damascus - also includes Damascus City, which administratively constitutes a separate Municipality (In this study, Damascus includes both of these administrative divisions).

2). Aleppo
3). Homs
4). Hama
5). Latakia
6). Deir-ez-Zor
* 7). Idleb
8). Hasakeh
* 9). Al-Rikka
10). Sweida
11.) Dara
* 12.) Tartous
* 13). Quneitra

* Note - Idleb and Al-Rikka became provinces at the beginning of the 1960's, while Quneitra and Tartous became provinces around the middle and the latter part of the 1960's respectively.

Also, Syria is divided into the following regions:

1 ). The Coastal Region which includes the provinces of Latakia and Tartous.

2 ). The Southern Region which includes Damascus, Sweida, Dara and Quneitra provinces.

3 ). The Northwest Region which includes Aleppo and Idleb provinces.

4 ). The Central Region which includes Homs and Hama provinces.

5 ). The East Region which includes Hasakeh, Al-Rikka, and Deir-ez-Zor provinces.

6). The individual provinces: Homs, Hama, Damascus, Sweida, Dara Quinetra, Hasakeh, Deir-ez-Zor, Al-Rikka, Aleppo, Idleb, Tartous and Latakia.

## I. Agricultural Production

The output data are taken from the Statistical Abstract of Syria 1950-1974. The output includes the following thirty eight main crops, plus animal products for the thirteen provinces of Syria.

### A. Crops

| Cereal | Dry Legumes | Vegetables | Industrial Crops |
|---|---|---|---|
| Wheat | Chick Peas | Garlic | Sesame |
| Barley | Lentils | Onions | Cotton |
| Maize | Haricot Beans | Tomatoes | Tobacco |
| Rice | Broad Beans | | Sugar Cane |
| Oats | Rambling Vetch | | Sugar Beet |
| Millet | Flowering Sern | | Hemp |
| | Bitter Vetch | | |
| | Peas | | |
| | Bitter Vetch | | |

| Fruit | Fruit con't |
|---|---|
| Quince | Plums |
| Pistachio | Nut |
| Olives | Pomogranetes |
| Grapes | Figs |
| Apricots | Almonds |
| Apples | Cherries |
| Pears | |
| Peaches | |

### B. Animal Products and Meat

Cheese
Butter
Wool
Hair
Milk
Eggs
Ghee Samneh (Clarified - Butter)
Sheep
Goats
Cows
Camels and Buffalo

### Output Data on Crops

Output data by province for the years 1950, 1951 and 1952 were computed on the basis of 1953-1955 average share for the respective province.

Data on Rambling Vetch per province were linearly extrapolated over the period 1956-1961 for this one crop.

B. Animal Products- data by province are reported in the Statistical Abstract for the period 1956-1974.

1. Tonnage of wool, hair, cheese, butter, ghee samneh (clarified butter), milk , and eggs for 1950-1955 were computed by using the country totals for the years 1950-1955 and each of the province shares for 1956-1958.

2. Wool tonnage by province for the period 1950-1955 was estimated on the basis of the sheep population in each province. According to official sources, 1.25 kilograms of wool are produced per head per year. Similar procedure was used to calculate hair production, where an estimate of a 1.5 kilogram per head per year is reported by the same sources.

3. On the basis of the Ministry of Planning sources (arabic), the number of milk producing cows is estimated to be 59% of the total cow population. Total tonnage of milk in Syria provided by the same sources for the years 1950 to 1955 was used to determine the final production by province for this period.

4. Egg figures for 1950 to 1955 were based on the official Syrian source. An estimate of 50% of all chickens lay 130 eggs annually.

5. Output category of slaughtered animals is reported in the Statistical Abstract 1950-1974 . Total slaughtered sheep, goats, cows, camels, buffalo were assumed to be 1.6 of the figures reported by the slaughter houses. Adjustments were made for the whole period except the 1970 figures which were computed using the 1969 and 1971 averages. Figures for slaughtered sheep, goats, and cows include all slaughtered lambs, kids, and calves respectively for 1950 -1973.

II. Output Prices

A. The 1963 wholesale crop prices for the country were obtained from the Syrian Ministry of Planning. (Arabic) The annual crop prices were derived for the period 1950-1973 through wholesale price index.

B. The 1963 animal product wholesale prices are obtained from the Ministry of Planning. (Arabic) The prices are adjusted through wholesale price index.

C. Livestock prices are used for the respective categories of slaughtered animals.

III. Input Quantity Indexes

A. Livestock - Input quantities for livestock were provided by the annual Statistical Abstract 1950-1974. Cow figures were complete for the period. Sheep and goats were not available from 1966 to 1970.

Chicken figures for 1956-1973 were available by province in the Statistical Abstract. Computations for 1950 to 1955 were linearly interpolated by using the 1956 distribution by province and the total Syrian Figures.

Data were not available for calf quantities per province before 1963. Based on total Syrian data received from government sources, the relationship between calves are estimated to be 30% of total number of cows. Cow quantities per province used by the Statistical Abstract were used to compute the figures for calves from 1950 to 1974.

B. Bullock Labor

Work animals were considered to be horses, mules, camels, oxen, buffalo and asses. Figures were complete for horses, mules, asses and oxen per province. From 1966 to 1970, figures for camels and buffalo were not available. For the period 1966 to 1969, figures for camels and buffalo were linearly interpolated, using information from the 1964, 1965, 1970 and 1971 Statistical Abstracts.

C. Livestock Prices

The 1963 price for livestock was taken from the Ministry of Planning (Arabic) 1963. Information on price changes was taken from the Syrian Export Series, (various issues) and was used to back date and update prices for sheep, goats, cows, and chickens.

Changes in cow prices are used to adjust buffalo, oxen, horses, mules, asses and camel prices for the missing years. Calf prices are considered to be 35% of cow prices according to official sources.

D. Machinery

Machinery in use per province is given for 1970, 1972, and 1973 from the Ministry of Planning and from the Statistical Abstract. Totals for tractors were obtained from Statistical Abstracts and Ministry of Planning (Arabic). Total combines for 1950, 1951, and 1952 were calculated from figures from the Statistical Abstracts. From 1961 to 1965, totals for the country were reported in the F.A.O. Production Books. Water pump totals were reported in Statistical Abstracts 1961-1973. The 1950 to 1960 totals were calculated on the basis of official information.

The 1970, 1971, and 1973 distribution by province for the various categories of capital machinery were used to extrapolate for the rest of the period covered in the study.

E. Machinery Prices

The summary of monthly foreign trade, 1963, was used for the base price of machinery figures for the various machinery categories. Information on U.S.price changes , along with information from the F.A.O. Production Yearbook, were used to derive the various categories of machinery prices for the years 1953, 1958, 1965, and 1970.

F. Land

Land figures were divided into irrigated and non-irrigated land per province, reported in the Statistical Abstract, 1950-1974. Land rent was not available. Rent from expropriated lands was collected, but was found to greatly under-estimate the land share. Alternatively, and consistent with official estimates, value of rent was taken to be 25% of total crop value per year per province.

G. Seed

Quantities of seed by province for the period 1950-1973, was computed on the basis of the Ministry of Planning estimates of seed rate for 10 main crops.

H. Fertilizer

Total quantities of nitrogen and phosphate consumed by farmers for 1950-1973 were only available for the country as a whole. The fertilizer rate per crop for Egypt was used to compute fertilizer quantities by province. The rate was taken from the Agricultural Potential of the Middle East . Land area figures for main crops were taken from Statistical Abstracts.

The 1963 fertilizer price was also taken from the Agricultural Potential of the Middle East. Price changes from F.A.O. Production Yearbook and from official Syrian Sources were used to adjust fertilizer prices over the period.

I. Labor Employed in Agriculture

Agricultural labor figures were not available per province or per year for Syria. Information on population, by province and on the number of economically active population (employed and unemployed) for Syria, were obtained from Statistical Abstracts and from

Population Censuses of Syria for 1960 and 1970 , as well as from the F.A.O. Demographs and Population Estimates , 1974.

The economically active population in agriculture was adjusted for unemployment, fishing and forestry. The unemployment figures were computed on the basis of a yearly unemployment rate reported in the 1960's and 1970's by the Ministry of Social Affairs and Labor. For the 1950's an estimate of unemployment of 6% was used. Total cost of fishing and the annual average wage were used to determine the number of fishermen.

Labor cost in forestry was calculated from information provided by the Ministry of Planning. Labor cost was set at 5% of the value of forest output for the 1950's, while 10% of the value was set for the 1960's. Forest area by province was reported in the Mediterranean Development Project, for Syria,F.A.O. 1959 . The forestry provinces include Latakia, Homs, Hama, Damascus, and Aleppo.

# VITA

Nabil Khaldi
178 Centre Ave.
New Rochelle, New York 10805
Tel: (914) 632-1210

Date of Birth - May 27, 1936
Marital Status - Married

## Employment and Experience :

Associate Professor, Iona College (Graduate School of Business) New Rochelle, N.Y. 1974 to date.

Assistant Professor, , Iona College, Dept. of Economics, New Rochelle,N.Y. 1970-1973

Assistant Professor, University of Dallas, Irving, Texas - 1969-1970

Assistant Professor, West Texas State University, Canyon, Texas - 1968-1969

Instructor, National Teaching Fellowship, Texas Wesleyan College, Fort Worth, Texas

Research Assistant, Dept. of Economics, Southern Methodist University, Dallas, Texas - 1965-1967

## Education :

1. Ph.D. Economics, Southern Methodist University, January, 1973.
2. M.B.A. Major - Economics, Minor - Statistics, Southern Methodist University, Dallas, Texas 1962.
3. B.B.A. Major - Economics, Southern Methodist University, Dallas Texas - 1960.

## Fields of Specialization :

Economic Theory (Macro and Micro), Human Resources and Manpower, Econometrics, and Statistics.

## Dissertation Title :

"The Productive Value of Education in the U.S. Agriculture, 1964" *

---

* 1. "Education, Information, and Efficiency" N.B.E.R. (Book to be published in 1975 containing in Chapter II a summary of Ph.D. dissertation "The Productive Value of Education in U.S. Agriculture") Co-authors - Finis Welch and Robert Evenson.

2. "Agricultural Research and Productivity", Robert Evenson and Yoav Kislev, 1973. Book published by Yale Economic Growth Center and N.S.F. (Contains several references to Ph.D. dissertation.)

Research, Publications, and Participation in Professional Meetings:

| | |
|---|---|
| Master's Thesis Topic : | "Syria, A Decade of Economic Development, 1950-1960" |
| Research : | Research study "Agricultural Productivity in the Fertile Crescent and the Nile Valley", N.S.F., administered by Yale University. 1974-1975. |
| Projected Research: | "Agricultural Research and Prodictivity In the Fertile Crescent and Egypt", a research proposal. |
| Publications: | "Education and Allocative Efficiency in U.S. Agriculture", American Journal of Agricultural Economics , forthcoming, Fall, 1975. |
| Member: | Association for Social Economics |
| Paper Presented: | on Ph.D. dissertation presented under Manpower Administration Grant number 31-46-70-06. Human Resources and Manpower Conference, Summer, 1973, Southern Methodist University, Dallas, Texas. |

Scholarships, Fellowships, Academic Honors :

1972-1973 - Manpower Administration Grant for Ph.D. dissertation (number 31-46-70-06).

1968- Summer, National Science Foundation Grant (through Southern Methodist University, Dept. of Economics, Dallas, Texas).

1967-1968 - National Teaching Fellowship

1967-1968 - Ford Foundation Fellowship (S.M.U.)

1965-1966 - Fellowship, Dept. of Economics, (S.M.U.)

1959-1962 - International Student Scholarship.

Research gen

TOGHOVEL BANK

TOGHOTEL LOME

TELEX 5264

WASHINGTONDC 248423

Distribution: Mr. T. King
Mr. Gulhati
Mr. Zacharias's office

DISCH

ATTN. MR TIMOTHY KING

OCT 7

TELEX 5264

1975

WASHINGTONDC 248423

DISCUSSED MIGRATION PROJECT WITH MRSAME BARIMA AT
PARIS, ADDO AND NAUBUNYA ACTING DIRECTOR
ISSER AT ACCRA. OUR ASSESSMENT OF PROBLEM CORRECT. ADDO
TOOK LEAVE ONE YEAR FOR CAIRO JOB LATER CANCELLED DUE UN
BUDGET CUT YOUR REPLY NOT REACHED BARIMA OR ADDO. GAVE COPIES.
BARIMA AGREEABLE TO ANY ARRANGEMENT ACCEPTABLE TO ADDO. BARIMA
VISITS WASHINGTON 21 - 28 OCTOBER FAIR FAX HOTEL . SUGGEST
YOU MEET HIM .
ADDO AND OTHERS AT ISSER HAVE STRONG VIEWS AGAINST COOPERE
CORDERRE COORDINATION BY BOSTON AND FOR FORMAL CLEARANCE
BY CODESRIA. WANT REGIONAL COORDINATION AT ISSER. WOITE HAPPY
TO ASSOCIATE LUCAS AND COLLIER AS CONSULTANTS TO BANK
OR ISSER FOR PROJECT DURATION. NOT ENTHUSIASTIC ABOUT MAMMANI,
BAAW -DWC MOH.
ISSER REVISING OUR PROJET PROPOSAL WILL SEND COPIES TO BARIMA AND
YOU BY 10TH .
I AM MOVING FROM AMBASSADOR TO UNIVERSITY GUEST HOUSE LEGON ON
9TH .

ZACHARIAH

WELLRECEIVED 9

Research gen.

October 6, 1975

Mr. Ben Aston
The Administrative Staff College
Greenlands
Henley-on-Thames
Oxfordshire, RG9 3AU
England

Dear Mr. Aston:

I am replying to your letter of September 30 to Hollis Chenery. I confess I am not at all sure how to answer your question. Perhaps it would be best to start by simply giving you a description of the Bank's Research Program. You can most easily get this from the enclosed book of abstracts, which is still the latest available (the new version is not yet printed). I am also enclosing a pamphlet on the Development Research Center, where much of the Bank's fundamental research is carried out.

The dissemination process is one which we are struggling with in common, as far as I can see, with everyone else who has an interest in application. One device is to write manuals specifically directed at the ultimate user (see page 8 of the DRC pamphlet). Another is to develop software which will make the processing of data quicker, more accurate and therefore more pertinent to the policy makers and their advisers. We are thinking, but it is so far a gleam in the eye, of courses at the Bank's own Economic Development Institute; these would be for both Bank staff and outsiders. I should mention that our interest in the first instance is dissemination to the Bank's own staff, because they should be a good medium for dissemination beyond. The ultimate objective is obviously broader. These are instances. In general, we try to keep before us the question: for whom is this or that research intended and how will it get to him? But we have not yet found a universal open sesame!

If you have any other questions, please let me know. I do have one question for you. Just which part of the book was useful to you in the context of the relationship between multinationals and host countries? And how?

Yours sincerely,

Signed B. B. King

Benjamin B. King
Research Adviser
Development Policy

Attachments

cc: Messrs. Chenery
Duloy (w/incoming but not attch.)

BBKing:gm

HARVARD INSTITUTE FOR INTERNATIONAL DEVELOPMENT
1737 CAMBRIDGE STREET CAMBRIDGE, MASSACHUSETTS 02138

HARVARD UNIVERSITY

TEL. (617) 495-
CABLE ADDRESS: HIID
TWX No.: 7103200315

October 6, 1975

Mr. Roger D. Norton
Development Research Center
World Bank
1818 H Street, N.W.
Room N260
Washington, D.C.

Dear Roger,

When Dave Cole and I were discussing the enclosed research proposal, he reminded me that you were still with the DRG and might be an appropriate person to contact. Since I last saw you, I have spent four years in Africa advising on industrial development. From my experience in Tanzania, where we advised the government on long-term industrial strategy, and from casual observation of changing Third World attitudes towards the management of natural resource exploitation, I have become convinced that the time has come to study seriously the implications of natural resource-based industrialization as a development strategy. It seems to me that such a strategy, whether based on production for export or home consumption, may lead to materially different development outcomes than the two strategies that dominated the last two decades, import substitution and export promotion. It is not always clear that countries following resource-based strategies fully understand the implications of this approach, yet an increasing number of countries may be adopting such strategies in the next several years.

The proposed project would bring together a widely scattered group of existing research findings, make some research contributions based on existing data that has not been utilized for this purpose, and design a more intensive research program to generate original data on the nature of resource-based industrialization strategies. I am hoping to begin work on this project during the summer of 1976.

I would be grateful for your comments on the proposal. Is there a possibility that the Development Research Group might be interested in supporting research of this nature? Perhaps after you have had a chance to read it, we could discuss the proposal by telephone.

I would have liked to send a sample of the industrial strategy planning we have done in Tanzania, but none of that work is ready for circulation. Instead, I am enclosing a draft of a monograph on industrial strategy formulation that is being published by UNIDO. Chapter 5, though fic-

tionalized and simplified, gives a good idea of the strategy approach we have taken.

Regards to Kay. I look forward to getting together with you sometime to catch up on what you have been doing for the past five years.

Sincerely,

Mike

Michael Roemer
Associate Director for Research

MR:ed
Enclosures

# Record Removal Notice

The World Bank Group Archives & Records Management

| File Title | | Barcode No. |
|---|---|---|
| Research Projects - General 1975 / 1977 Correspondence - Volume 3 | | 1064732 |
| **Document Date** | **Document Type** | |
| 06 October, 1975 | CV / Resumé | |

**Correspondents / Participants**

**Subject / Title**
Michael Roemer

**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 |

RESEARCH PROPOSAL

INDUSTRIAL STRATEGIES BASED ON EXPLOITATION OF NATURAL RESOURCES

Harvard Institute for International Development

The dominant strategy for industrialization in the developing countries since World War II has been, and to a great extent still is, import substitution. However, during the past 15 years there has been a strong counterpoint theme running through the development literature that emphasizes the inherent limitations to this strategy, its tendency towards inefficiency and its inability to promote balanced, integrated industrial development, even over the long run. This counter-theme is being heard increasingly by leaders of the developing world, who are turning away from import substitution and searching for new strategies.

An alternative strategy with considerable support from western development economists has been export-led industrialization. Following in Japan's footsteps, Taiwan, South Korea, Hong Kong and Singapore have been notably successful in exporting manufactured goods; in the first two cases, this has been part of a process of "export substitution" in which manufactured exports gradually replace agricultural exports in importance. Based on their record, export-led industrialization seems a superior alternative, especially for smaller countries with a poor natural resource base. However, the demands of such a strategy are great. Competition is very stiff in the world markets of the commodities in which developing countries have comparative advantage and it may be difficult for latecomers to overcome their early disadvantages. It takes considerably more management and labor skill to achieve the productivity needed to compete in world markets than it does to produce for home consumption behind high tariff barriers. And the developing countries have inadequate tax bases to

support the subsidization necessary to progress along the learning curve into a region of high productivity. Although some countries will successfully make the transition to produce exportable, labor-intensive manufactures, it seems unlikely that the majority of developing countries can do it. Moreover, most of them are unwilling to undertake the kinds of changes necessary to make the transition and some of them have attractive alternatives.

Disenchanted with import substitution and either unable or unwilling to pursue an export strategy, many developing nations are beginning to focus on a different strategy: industrial exploitation of natural resources. The success of OPEC countries in raising the price of petroleum and their accelerated attempts to invest additional revenues in petroleum-based industries have focused attention on natural resources as an industrial base for developing countries. Petroleum exporters' efforts to establish refineries, fertilizer plants and petrochemical complexes have been well publicized. Countries with other resources are following suit. Jamaica has forced the aluminum companies to process bauxite within the country; Zambia is basing its industrial expansion substantially on copper industries; Peru is building additional steel and copper manufacturing capacity; Malaysia and other countries are beginning to export wood products in preference to timber. Even Tanzania, poor in natural resources by comparison to these countries, is turning to natural resource exploitation as the dominant base for its industrialization. This incipient trend was given formal voice by Algeria at a recent meeting of developing countries in Algiers when it called upon UNIDO to take steps to assist Third World countries in developing manufacturing industries based on their own resources.

## A. The Development Literature

The literature in English on import substitution has been fully developed and serves as a model for other topics on industrial strategy. This literature has identified the important characteristics of the import substitution strategy, associated a common set of government policies with the strategy, analyzed the attractions of import substitution and its inherent and self-defeating weaknesses, and reported on a large and growing number of country studies that illustrate these points and emphasize the characteristic elements common to a wide variety of countries. The largest and most productive concentration of articles on import substitution has come from Williams College, whose Center for Development Economics has specialized in the subject for a decade; these are ably summarized by Bruton (1970). The literature includes development of new analytical tools to measure the efficiency of import substitution, especially effective rates of protection (for appraisals of this literature see orden, 1971, Appendix I, and Balassa, 1971) and domestic resource cost (Bruno, 1972). It has also spawned extensive case studies of industrialization, such as the collection under the guidance of Little, Scitovsky and Scott (1970) and a renascence of political economy, implicit in most of the case studies but captured most incisively by Hirschman (1968). The ultimate mark of success for this literature has been its undeniable impact on the industrial policy of many developing countries.

The literature on export-led industrialization is not as well defined as that on import substitution, but is rather one theme of a broader literature on policies designed to break out of the import-substitution syndrome. Ranis (1973 and 1971) has called this "export substitution" or

"the second restructuring." In this reaction to import substitution, market prices are generally brought into line with scarcity values; this in turn encourages greater dependence on labor and less on natural resources (including land); which leads to the eventual replacement of unprocessed agricultural exports by exports of labor-intensive manufactures. The case study literature is largely East Asian oriented, concentrating on Taiwan (e.g., Hsing, Power and Sicat, 1970), South Korea (e.g., Frank, Kim and Westphal, 1975, and various publications of the Korea Development Institute) and, to a lesser extent, the city-states of Hong Kong and Singapore (e.g., Geiger and Geiger, 1973), these being the principal examples of successful export-led industrialization in the developing world; the prototpye is, of course, Japan.

There is no extensive literature on natural resource-based industrialization, although there are at least two strands in the development literature that have something to contribute. The first, which has been called the "basic industry" approach, takes its cue from the industrialization programs of the Soviet Union, China and North Korea, which were based on exploitation of domestic resources primarily for domestic consumption. Thomas (1974) and Rweyemamu (1973) are contributors to this literature, as are several authors of case studies of the three socialist countries named. The basic industry strategy aims at realizing a complete set of backward linkages from domestic consumption to natural resources and developing a balanced industrial structure; a principal goal is substantially reduced dependence on world trade to transform raw materials into producer goods.

The second strand is concerned with a very different aspect of natural resource exploitation: the export of staple products. The staple theory

literature on developing countries, which derives from Innis' studies of Canada and North's of the United States, includes studies of tropical agriculture (Baldwin, 1956), copper in Chile (Reynolds, 1965), and Northern Rhodesia (Baldwin, 1966) and fishmeal in Peru (Roemer, 1970). These studies concentrate on the production function of exploiting each natural resource and the detailed impact of each on economic development. The method should be useful in studying the impact of resource-based industry on development.

These two different strands of literature on resource-based industrialization indicate that there is not one resource-based strategy, but two. One strategy emphasizes self-reliance by processing resources primarily for use at home. A second resource-based strategy aims at the further processing at home of an extensive resource that will continue to be exported, but in finished form and not as a raw material. A choice between these two very different strategies will depend to some extent on national development policy, but is more likely to be dictated by the extent of the resource in relation to the size of the country. It seems likely that most of the resource-rich countries will continue to export their products in some form, even if their long-run goals include self-sufficiency and less dependence on world trade. A complete literature of resource-based industrialization should develop models, or at least a consistent set of characteristics, to describe each of these strategies of resource exploitation. The literature would also develop tools for analyzing resource-based industries, but should use existing tools if they are applicable. It would include case studies of resource-based strategies to test the universality of the identified characteristics. Finally, the literature should provide prescriptions for national policy in promoting resource-based industries.

Although it has been convenient to speak in terms of alternative strategies of industrialization as if there were three or four distinct types of strategy, in practice the differences are normally those of emphasis or degree rather than of kind. There have been extreme, polar types of strategy in history: the Soviet Union's self-sufficient, basic industry strategy of the 1930's and several Latin American examples of extreme import substitution during and after the second world war come to mind. However, generally countries try to exploit a range of industrialization opportunities open to them, though they will favor one type of investment over another when both are possibilities. Viewed as the result of a formal planning procedure, a strategy is a set of investments and supporting policies that best satisfies certain national objectives; these investments and policies are chosen from a set of possible activities, but the selection is constrained by limited resource availabilities and limiting institutional, cultural and other factors. Although a government may decide a priori that a particular strategy would best satisfy its national goals, it is likely to discover that both limited factor resources and a limited range of practical alternative investments prevent the implementation of a "pure" or extreme form of the desired strategy. What emerges instead is a mixed strategy that contains, perhaps, elements of several different approaches, but that emphasizes one or two over the others. For example, a country that decides to industrialize by more complete processing of a raw material export will also exploit some opportunities for import substitution and may also try to export some labor-intensive manufactures, depending on the availability of factor resources relative to practical alternative investments of each type. Thus, although this research proposal is couched in terms of distinct strategies in order to make clear the distinctions between them, the research is really about different emphases in mixed approaches to industrialization

that contain elements of different "pure" strategies.

B. Issues in Resource-Based Industrialization

The development literature suggests some issues that need to be addressed in a study of resource-based industrialization. Most but not all of these issues apply to either of the two resource-based strategies.

1. Industrial structure. How will each of the resource-based strategies differ from import substitution, from labor-intensive export-led strategies, or from each other in terms of the composition of output by ISIC groups; the mix of consumer goods, intermediate goods and capital equipment; the degree of backward and forward integration; and the extent to which the strategy is self-sustaining, especially in contrast to the self-limiting nature of import- substitution. The latter issue begins to move out of purely structural questions and into the realm of political economy. Chenery and Taylor's (1968) cross-country study of industrial structure and country studies such as Chenery, Shishido, and Watanabe (1962) on Japan and Westphal and Kim (1973) on Korea indicate the kinds of analysis that can be useful in differentiating industrial structure.

2. Employment creation. The presumption has been that natural resource-using industries, in contrast to agricultural processing and even import-substitution industries, are highly capital intensive and will not create as much employment. The record in countries with resource-based industries should be investigated to test this presumption. The previously cited literature on staple theory and a variety of industry and country studies can be exploited for this purpose (see, e.g., Morawetz, 1975). It will also be necessary to investigate the potential choice of technology to determine the extent of possible factor substitution in these industries (see, e.g., Della Valle, 1975,

although he emphasizes mining rather than manufacturing.). The picture given by these two results should be compared with results from other strategies to see whether resource-based strategies must necessarily sacrifice employment to achieve its other goals.

3. Distribution. Several issues are involved. First, the profile of factor payments in resource-based industries is generally expected to be skewed towards technicians and skilled workers, groups already in the upper income classes. Second, because these industries tend to be capital intensive, wages are a small fraction of total costs and labor productivity is high; thus firms can afford to, and do, pay workers well above the wages prevailing in the rest of the economy or even in the rest of manufacturing for a given skill class. Third, to the extent these firms exercise some degree of monopoly power in world markets, their ability to earn monopoly rents may weaken their resistance to wage demands and contribute to the tendency to pay above-average wages for similar skill classes, so that upper-income workers capture part of monopoly rents. These tendencies have been responsible for creating the familiar enclave or extremely dualistic development noted in many resource-rich countries (Baldwin, 1966; Levin, 1960). Can choice of technology and national policies ameliorate this distributional impact? The international and domestic incidence of taxes on profits is one of several policy questions to be explored (e.g., Gillis and McClure, 1975).

4. Barriers to entry. Both the multinationals that dominate trade in natural resources and the major importing countries may present difficulties to the raw material exporter that wishes to sell semi-finished or finished

goods in world markets. It has generally been considered difficult for developing countries to enter the processing of some mineral resources, especially metals and petroleum, without participation from foreign investors for several reasons. First, there are substantial scale economies so that investments are large and lumpy and foreign financing may be necessary. Second, if, because of scale economies or resource endowment, the resource-based industry must enter export markets, market organization may be a barrier. Some of these markets are dominated by a few large multinational corporations with integrated operations and substantial market power in consuming countries. Tilton (1966) has demonstrated that ownership of resources by such firms is a more important determinant of trade patterns for many metals than traditional economic variables. Moreover, multinationals sometimes make it difficult for independent producers to sell their products, especially semi-finished products. (See, e.g. Penrose, 1968, on petroleum and Stobaugh, 1972, on petrochemicals.) Third, multinational firms may control technical processes for many products, through patents or monopoly over knowledge. Finally, technical skills are sometimes difficult to obtain from other than the major firms in the industry.

Importing countries may throw up barriers of their own to exports of semi-finished and finished products of natural resources. Although average tariff levels in industrial countries are low, effective protection against processed products tends to remain high in order to protect domestic processers. If a large exporter of a particular raw material begins to

offer the product in finished rather than in raw form, importing country industry may gain increased protection, which could take the form of increased tariffs or, more likely, non-tariff barriers. The latter may include attempts at international agreements, such as that in cotton textiles, to limit trade in finished products. Such international trade considerations are slightly off the main theme of this project, which concerns the impact of resource-based industrialization on national economic structure, but it will be useful to review the possible impact of trade barriers as external constraints on resource-based strategies.

5. National dependence. Either of the resource-based strategies aims to reduce dependence on world markets and on industrial countries. However, there are different aspects of dependence and different time horizons over which to achieve it. If dependence is defined as a trade structure in which raw materials are exported to pay for the intermediate and capital goods required by domestic industry, then a resource-based strategy that produces inputs for domestic industry can obviously reduce dependence. Industrial processing of resource-based exports does not reduce dependence on trade, but can increase a country's monopoly or bargaining power by competing with established multinational firms of various stages of processing and fabrication. It may also lead to capital goods industries (c.f. fishmeal in Peru; Roemer, 1970), reducing dependence on imports. But either resource-based strategy may, in the early stages at least, require increased dependence

on foreign capital, manpower and technology. It is important to determine the degree of this dependence and the time it may take to reduce it. In contrast, labor-intensive export-led strategies, which resemble resource-based export-led growth in their increased dependence on world markets, probably reduce dependence on foreign factors of production even in the short run. Thus the contrast between these strategies will be illuminating.

6. Differences among resources. The issues discussed above probably apply most strongly in mineral resources, particularly metals, petroleum and natural gas. However, they may not apply in the same way to forest and fishery resources and the degree of application may vary considerably among minerals. The major natural resources should be categorized in terms of the variables discussed above.

7. National policies. Investigation of these issues should suggest sets of national policies which will promote resource-based industrialization and capture the favorable effects while mitigating the unfavorable ones.

C. Research Project at HIID

Section A pointed out that the literature on resource-based strategies is not highly developed; the contributions that exist are scattered and have not been brought together to form a consistent set of characteristics, as was done for import substitution. Moreover, several of the key issues discussed in Section B could be illuminated by data that may exist in various forms, but which have not been exploited systematically to throw light on these problems. Thus the first part of a research project should have three purposes:

(1) Search the literature on resource-based industrialization,

including possible contributions from related bodies of literature. Prepare a review article or monograph summarizing the literature; drawing analytical and policy conclusions from it insofar as possible; identifying the major gaps in the literature and suggesting how these might be filled.

(2) Collect and analyze data from published United Nations (especially UNIDO) sources, private industry and consultants on questions of industrial structure, employment, factor payments, alternative technologies, and international market characteristics that might contribute to understanding the issues raised in Section B. This would result in a paper that, together with the literature review, could form a substantial monograph on natural resource-based industrialization.

(3) Design a field research project to test systematically hypotheses suggested by the literature and data search, as described in the next paragraph.

This would be a relatively small research project, involving about nine professional man-months over a year and a half, as described in Section D.

The second part of the project would be a much larger effort, but its detailed design would depend on the findings of the first part. During the first 18-month period of the project a promising group of resources and countries would be identified for case studies. The hypotheses, models and methods for these studies would also come out of the literature and data

search. HIID would then attempt to engage local research institutions in each country to participate in carrying out the case study. The principal work and authorship of the case studies would rest with the host country institution, but HIID economists would serve as consultants for each case, guiding the design and execution of field research to ensure consistency and comparability among the various studies. The studies would then be compiled and summarized at HIID. One or more volumes would result from this study. Although the level of resources involved would not be known until part one is completed, it is expected that part two would take from two to three years, though not all research institutes would be engaged for the full period.

D. Research Staff

The principal investigator would be Michael Roemer, Institute Fellow of HIID, whose resume is attached. His qualifications include (i) authorship of a study on the resource-based fishmeal industry of Peru (Roemer, 1970); (ii) service as industry adviser with the Harvard project in Ghana from 1970 to 1972, which resulted in an article (Roemer, 1975) and a book on project analysis (Roemer and Stern, 1975); (iii) service as project director for the UNIDO-sponsored industrial strategy project in Tanzania, which resulted in Tanzanian selection of a natural resource-based strategy of industrialization; (iv) completion for UNIDO of a monograph on a practical method for designing industrial strategies and simultaneously eliciting from political decision-makers the national goals which have heretofore been considered an essential prerequisite for strategy

design; and (v) participation (during 1975-6) in a study of Korean development since World War II, with principal responsibility for chapters on changing macroeconomic structure and industrial strategy. Roemer would, with the support mentioned below, be responsible for completing part one of the project, including a design for part two. This would require nine months of his time over the period from mid-1976 to the end of 1977.

The study of resource-based industrialization would be part of a series of studies on natural resource exploitation being undertaken by HIID. The Natural Resources Group at HIID consists of S. Malcolm Gillis, whose principal focus is the exploitation and taxation of natural resources; Joseph J. Stern, who concentrates on international trade in raw materials; and Roemer. Gillis and Stern, while engaged in studies of their own, would serve informally as consultants to the resource-based strategy project.

In addition, research support would include a graduate student to serve as research assistant for about nine months; secretarial time; and a standard set of HIID overheads, costed at 18.5% of the base amount.

E. Funding Request

We request support for part one of the proposed project. No commitment to support a second stage is implied, but of course we would hope that the funder of the first stage would be interested in considering the subsequent research design.

A project budget is attached.

Michael Roemer

October 3, 1975

PROJECT BUDGET

NATURAL RESOURCE-BASED INDUSTRIALIZATION

| | | | | |
|---|---|---|---|---|
| 1. | Professional Salaries and Benefits | | | |
| | A. Salaries | | | |
| | M. Roemer | 9 mos. | $25,000 | |
| | B. Harvard Benefits | | 3,750 | |
| 2. | Secretarial and Research Assistance | | | |
| | A. Secretary | 4.5 mos. | $ 4,540 | |
| | B. Research Assistant | 7.0 mos. | 6,320 | 10,860 |
| 3. | Travel and Subsistence | | | |
| | A. Air Fares | | | |
| | 1 r.t. Boston-Vienna-Boston | | $ 930 | |
| | 2 r.t. Boston-New York-Boston | | 140 | |
| | 2 r.t. Boston-Washington-Boston | | 230 | 1,300 |
| | B. Subsistence (30 x $40/day) | | | 1,200 |
| | C. Preparatory Expense | | | 50 |
| 4. | Other Direct Costs | | | |
| | A. Communications | | $ 500 | |
| | B. Copying, office supplies, etc. | | 500 | |
| | C. Computer | | 500 | |
| | D. Books and Publications | | 200 | 1,700 |
| | Total Direct Costs: | | | $43,860 |
| 5. | Harvard University Overhead (18.5% x $43,860) | | | $ 8,110 |
| | GRAND TOTAL: | | | $51,970 |
| | | | Say, | $52,000 |

## BIBLIOGRAPHY


Bela Balassa, 1971. "Effective Protection: A Summary Appraisal." In Grubel and Johnson, eds., Effective Tariff Protection. Geneva: General Agreement on Tariffs and Trade.

Robert Baldwin, 1966. Economic Development and Export Growth: A Study of Northern Rhodesia. Berkeley: University of California Press.

----------, 1956. "Patterns of Development in Newly Settled Regions." Manchester School of Economics and Social Studies, 24: 616-79.

Michael Bruno, 1972. "Domestic Resource Cost and Effective Protection: Clarification and Synthesis." Journal of Political Economy, 80:16-33.

Henry J. Bruton, 1970. "The Import Substitution Strategy of Economic Development." Pakistan Development Review, 10:123-46.

Hollis B. Chenery and Lance Taylor, 1968. "Development Patterns: Among Countries and Over Time." Review of Economics and Statistics, 50:391-416.

----------, Shuntaro Shishido and Tsunehiko Watanabe, 1962. "The Patterns of Japanese Growth." Econometrica, 30:98-139.

W. M. Corden, 1971. The Theory of Protection. London: Oxford University Press.

P. Della Valle, 1975. "Productivity and Employment in the Copper and Aluminum Industries." In A.S.Bhulla, ed., Technology and Employment in Industry. Geneva: International Labor Office.

Charles R. Frank, Jr., Kwang Suk Kim and Larry E. Westphal, 1975. Foreign Trade Regimes and Economic Development: Vol. VII, South Korea. New York: National Bureau of Economic Research.

Theodore Geiger and Frances M. Geiger, 1973. Tales of Two Cities: The Development Progress of Hong Kong and Singapore. Washington, D. C.:National Planning Association.

Albert O. Hirschman, 1968. "The Political Economy of Import Substitution." Quarterly Journal of Economics, 82-1:1-32.

Mo-Huan Hsing, John H. Power and Gerardo P. Sicat, 1970. Taiwan and Philippines: Industrialization and Trade Policies. London: Oxford University Press.

Jonathan V. Levin, 1960. The Export Economies. Cambridge, Mass.: Harvard University Press.

Ian M. D. Little, Tibor Scitovsky and Michael Scott, 1970. Industry and Trade in Some Developing Countries. London: Oxford University Press.

Bibliography (cont'd.)

David Morawetz, 1975. "Import Substitution, Employment and Foreign Exchange in Colombia: No Cheers for Petrochemicals." In C. P. Timmer, et. al., The Choice of Technology in Developing Countries: Some Cautionary Tales. Harvard University: Center for International Affairs.

Edith T. Penrose, 1968. The Large International Firm in Developing Countries: The International Petroleum Industry. Cambridge, Mass.: MIT Press.

Gustav Ranis, 1973. "Industrial Sector Labor Absorption." Economic Development and Cultural Change, 21: 387-408.

----------, 1971. "The Role of the Industrial Sector in Korea's Transition to Economic Maturity." Yale University, Economic Growth Center.

Clark Reynolds, 1965. "Development Problems in an Export Economy: The Case of Chile and Copper." In Mamalakis, et. al., Essays on the Chilean Economy. Homewood, Ill.: Richard D. Irwin.

Michael Roemer, 1975. "A Neoclassical Employment Policy Applied to Ghanaian Manufacturing, 1960 to 1970." Journal of Development Studies, January 1975.

----------, 1970. Fishing for Growth: Export-led Development in Peru, 1950-1967. Cambridge, Mass.: Harvard University Press.

---------- and Joseph J. Stern, 1975. The Appraisal of Development Projects: A Practical Guide to Project Analysis with Case Studies and Solutions. New York: Praeger, 1975.

Justinian Rweyemamu, 1973. Underdevelopment and Industrialization in Tanzania. London: Oxford University Press.

Robert B. Stobaugh, 1972. "The Neotechnology Account of International Trade: the Case of Petrochemicals." In L. T. Wells, Jr., ed., The Product Life Cycle and International Trade. Boston: Grad. School of Business Administration, Harvard University.

Clive Y. Thomas, 1974. Dependence and Transformation: The Economics of the Transition to Socialism. Monthly Review Press.

John E. Tilton, 1966. "The Choice of Trading Partners: An Analysis of International Trade in Aluminum, Bauxite, Copper, Lead, Manganese, Tin and Zinc." Yale Economic Essays, 6-2: 419-74.

Larry E. Westphal and Kwang Suk Kim, 1973. Industrial Policy and Development in Korea. Manuscript.

Research gen

Mr. Gregory B. Votaw

October 6, 1975.

Om P. Nijhawan

East-West Center - Research proposal for developing entrepreneurial initiative

You asked for a quick review of the above research proposal. The proposal, yet to be finalized, seems to be quite comprehensive. Following are however some of the issues which do not seem to have been adequately emphasised:

(a) Institutional/organizational arrangements and development of a conducive environment

Many small businesses spring up in developing countries, particularly in the so-called informal sector. Entrepreneurial skills, in most cases, are obtained through trial and error after making a number of mistakes. Only a few survive the process. The rate of failure is thus extremely high. This kills initiative and creates a climate which is not conducive to entrepreneurial development. Failures are primarily due to lack of even simple technical know-how, non-availability of credit perhaps due to the absence of acceptable collateral, inadequate knowledge of markets, accounting, house-keeping and low productivity. If proper entrepreneurial development climate is to be created it is not enough to study the few success stories to learn the 'how' of identifying people with entrepreneurial initiative. It would, on the other hand, seem important to devise organizational/institutional arrangements necessary for making success for the majority of those who do take initiative. Adequate technical assistance, timely credit and helping those who take initiative improve their business proposals can certainly decrease the failure rate and thus create a climate where initiative will be more readily forthcoming. The nature and scope of institutional arrangements for non-formal education therefore would seem to assume considerable importance.

(b) Business extension workers

Research in the selection and development of a core of leaders for the small-scale productive sector, and the nature of their training would seem important in developing the manpower that would be required to man institutions organized to help those who take initiative to establish small businesses. These 'extension workers' may be trained in the techniques of developing small business proposals and implementation of supervised credit schemes.

(c) Insurance

It may also be worthwhile exploring possibilities of insuring small business, particularly those operating under supervised credit schemes.

Mr. Gregory B. Votaw October 6, 1975.

(d) Local initiative
Development of literature for use in rural areas on simple techniques of processing, preserving and marketing agricultural and allied produce along with business extension may be helpful in mobilizing local initiative.

3. Entrepreneurial development is a vital issue in almost every developing country. A well conceived research proposal which aims at identifying and developing entrepreneurial potential is, therefore, worthy of support.

Om P. Nijhawan:ct

cc: Messrs. Sandberg, Bussink

Research gen

October 3, 1975

Dear Mr. Bilsborrow,

Thank you very much for your letter of September 29. The study you propose to undertake, on changes in enrollment rates and selected qualitative indicators of education in developing countries, sounds interesting and will be, I think, of great value. IT IS therefor unfortunate that our organization has only a very limited budget for external research projects and I see no immediate possibility for the Bank to finance your proposed project. I do hope, however, that you will be able to carry out your plans.

Yours sincerely,

Mats Hultin
Senior Adviser
Education Department

Mr. Richard E. Bilsborrow
Population Laboratories
School of Public Health
University of North Carolina
Chapel Hill, N.C. 27514

MHultin:sj

Research
cc Education

Messrs. Cole, Johanson, Pennisi, Stewart, Thint
D.S. Ballantine DSB

October 3, 1975

Research and Study Items Being Financed by Education Loan and Credits

Sometime in July this year, we contacted you or your staff to assist us in putting together a list of studies, etc. being financed through education loans or credits. The result is summarized in the attached.

We would appreciate it if you could review this list and make the necessary changes and/or additions.

Please let Reg Gomez have your comments by October 15 and he will then arrange to produce an updated version of this list for circulation. Thereafter, we plan to update the list periodically, preferably on a quarterly basis.

Attachment: a/s

RGomez:nm

Research and Study Items Being Financed by
Education Loans and Credits

| Project | Description | Estimated Cost | Study Being Undertaken by (Govt., Consultants, etc.) | Status |
|---|---|---|---|---|
| East Africa | | | | |
| Ethiopia III | Feasibility study of the production of science equipment for schools | 45,000 | Work to await completion of construction in 1976. | |
| Zaire | Management study of the organization of the Ministry of National Education at the central and provincial levels. | 340,000 | Belgian Firm of Management Consultants (SOLEMAR) | Underway; to be completed by December 1975 |
| Zambia III | An evaluation study of the production of science equipment for schools. | 46,000 | Rural Development Study Bureau of the University | Most of the data collected; first draft expected November 1975. |
| West Africa | | | | |
| Mali 1 | Basic Education Study | 435,000 | Unesco/IRAM | Study underway; to be completed in about 2 years. |
| Liberia I | 1) Higher education system development study<br>2) Wage structure study in both private and public sectors | 670,000 | 1) Unesco<br>2) ILO | 1) Study underway,<br>2) Report completed 6/74; additional labor force surveys underway. |
| Mauritania I | Evaluation of Koranic study | 340,000 | SEMA | Study underway; to be completed in about 2 years. |
| Gabon II | Preparation of an education reform sector work | 256,000 | Unesco | Work complements the UNDP/Unesco project; to be completed in about 5 years. |

| Project | Description | Estimated Cost | Study Being Undertaken by (Govt., Consultants, etc.) | Status |
|---|---|---|---|---|
| West Africa Cont'd | | | | |
| Ivory Coast II | a) Pre-investment study for education and training needs in rural development zones,<br>b) Pre-investment study for the introduction of more practical instruction in secondary education | 820,000 | a) Govt./Unesco/ Consulting firms<br>b) --- | -Terms of reference being finalized; study to be completed in 15 months.<br>-Not yet started. |
| Asia | | | | |
| Thailand II | Veterinary and agricultural education and training study. | 150,000 | Mid-West Univ. Consortium for International Activities | Final report expected end 1975. |
| Thailand III | Long term university (Songkla) plan. | 40,000 | Professor John Lubock. | Study expected shortly. |
| EMENA | | | | |
| Algeria | Pre-investment study of the Institute of Technology for Light Industries | 340,000 | SEDOTEC | Completed, report mailed to Bank. |
| LAC | | | | |
| Brazil II | Pre-investment studies and preparation of possible third education project. | 500,000 | PREMEN | Work begun. |
| Colombia | Sector survey | 500,000 | Consultants to be selected. | N/A. |

| Project | Description | Estimated Cost | Study Being Undertaken by (Govt., Consultants, etc.) | Status |
|---|---|---|---|---|
| LAC Cont'd | | | | |
| Dominican Republic | Feasibility study for the development and production of textbooks and teaching aids for primary and secondary education. | 260,000 | Consultants to be selected. | |
| Guyana III | Fact finding study on the effectiveness of vocational and technical education and skilled manpower migration in and out of Guyana | 200,000 | To be selected. | N/A. |

Research gen

Those listed below

October 1, 1975

Orville F. Grimes, Jr., VPD

Panel to Review Research Proposal

1. A panel consisting of Messrs. H. van der Tak (Chairman), A. Berg, W. Gilmartin, C. Koch-Weser and M. Selowsky will review the attached research proposal on Friday, October 10, 1975 at 3:30 p.m. in Room E1026.

| Proposal | Principal Researcher |
|---|---|
| Narangwal Population and Nutrition | R. Faruqee and D. Chernichovsky |

2. As always, the panel should seek answers to questions like (a) Are the issues raised by the research of interest to the Bank? and (b) Is the study so designed as to deal meaningfully with these issues? To aid in considering these questions, some informal guidelines — for review panels are attached.

many copies sent you in the past

3. The recommendations of the panel should be sent to me by Tuesday, October 14, preferably by Monday, October 13.

Attachments

Distribution:

Messrs. van der Tak, Berg, Gilmartin, Koch-Weser, Selowsky, Baldwin (for information)

cc: Messrs. T. King, Chernichovsky, Faruqee, Duloy, Gulhati, Kanagaratnam, B. B. King
Ms. Hazzah

OFGrimes:gm

WORLD BANK RESEARCH PROGRAM

Project Proposal

Date of Submission: September 24, 1975

SECTION A

PART I. PROJECT IDENTIFICATION

1. Title: Narangwal Population and Nutrition Research Project

| 2. Department Responsible: | 3. Staff Member Responsible: |
|---|---|
| Development Economics | R. Faruqee and D. Chernichovsky |
| 4. Total Cost (U.S. $): | 5. Total Staff Time (manmonths) |
| $180,850 | Professional: 13 mos. Special Services: None |

PART II. COORDINATION AND APPROVAL

1. Interdepartmental Coordination:

| | Department | Name & Signature | Support Project | Do not Support Project-Comments Submitted |
|---|---|---|---|---|
| a. | Development Research Center | J. H. Duloy | | |
| b. | Population and Nutrition Projects | K. Kanagaratnam | | |
| c. | Senior Nutrition Advisor | A. Berg | | |
| d. | | | | |

2. Approval:

Timothy King
Division Chief
T. King

Department Director
R. Gulhati

NOTE: Please consult instructions issued August 1973 for completion of this Form and preparation of project narrative.

Do not fill

Date received: _____

Review Panel: _____

## PART III. IMPLEMENTATION

1. Date Work to Start: Nov. 1, 1975 2. Date First Draft Expected: Sept. 1977

3. Final Report Due: December 1977

4. Implementation Method: Names:

a. Bank Staff . . . . . /x/ Faruqee and Chernichovsky

b. Individual Consultants . . . . . /  /

c. LDC Contractor/Institute . . . . . /  /

d. Developed Country Contractor/Institute /x/ Department of International Health - The Johns Hopkins School of Hygiene & Public Health

e. Seminar. . . . . /  /

5. Reports Expected in the First Year:

## PART IV. FINANCIAL AND STAFF DATA

1. Dollar Costs (Estimated Disbursements by Fiscal Year):

| | FY '76 | FY '77 | FY '78 | After FY | Total |
|---|---|---|---|---|---|
| a. Contractual* | 90,712 | 73,288 | 14,350 | | 178,350 |
| b. Travel | 1,000 | 1,000 | 500 | | 2,500 |
| c. Data Processing | | | | | |
| Total | 91,712 | 74,288 | 14,850 | | 180,850 |

*Includes cost of data processing.

2. Staff Requirements (manmonths):

| | FY '76 | FY '77 | FY '78 | FY | Total |
|---|---|---|---|---|---|
| a. Professional | 4 | 6 | 3 | | 13 |
| b. Special Services | - | - | - | | - |
| Total | 4 | 6 | 3 | | 13 |

## SECTION B

## NARANGWAL POPULATION AND NUTRITION RESEARCH PROJECT

This proposal is for finance to enable a team of researchers led by Professor Carl Taylor at the Johns Hopkins University School of Public Health to analyze data collected from two parallel field experiments in nutrition and family planning, which were conducted in 26 villages in N. W. India during 1966-74. The field phase of the research was financed by the United States and Indian Government sources, and by WHO. Assistance from USAID has brought the research to a point where the data have been prepared for analysis and a preliminary draft report, which describes the broad results of the experiment in aggregate terms, has been prepared. (This draft report and appendix tables and charts referred to in the text of the proposal, together with the survey instruments, may be borrowed from the sponsors of this proposal.) USAID is no longer concerned with nutrition and population activities in India and its support has now ended. Professor Taylor is therefore seeking financial support from the National Institutes of Health and from the Bank to complete the analysis. It is hoped that NIH will support the analyses whose interest is primarily medical and that the Bank will support those aiming to learn how to deliver family planning, health and nutrition services more effectively.

This proposal presents the work to be done with data from the nutrition project separately from that resulting from the population project, but it can be readily seen how closely the two projects are related. Page 9 of the population project proposal shows the relation of the two projects in the experimental design. Together they provide a remarkable body of data on status, knowledge and practice of nutrition, health and family planning matters, and how these evolved over time in response to the availability of public services. The concurrent collection of data on the functions performed by those delivering these services combined with information on household events and behavior offers an exceptional opportunity to analyze the trade-offs involved in the design of health and family planning delivery systems. A review of all field experiments in the family planning field anywhere in the world currently being undertaken in the Population and Human Resources Division suggests strongly that the Narangwal experiment is unique in having generated such a large quantity of longitudinal research data on household events and service delivery.

The research objectives of each of the two projects, and the conceptual framework underlying the research design is summarized on the front page of each of the two proposals. Page 3 in both the Population and Nutrition proposals contains a concise flow diagram of the hypothesized relationships that are expected to operate and whose relative strength will

be measured. A similar diagram (on the following page) can be used to show the links between the population and nutrition projects. The issues are plainly of central importance to the Bank's operations in the field of family planning and nutrition. One outcome of the analysis will be to derive implications for the design of service delivery systems.

In its study of questions relating to delivery systems and household fertility family planning, nutrition and health behavior, the objectives of this research proposal are central to the work program of the Population and Human Resources Division. Professor Taylor has generously invited members of the Division to join the research team. This offers very considerable mutual benefits:

The Johns Hopkins research team is strong in the fields of public health, statistics, and operation research; its economic competence, however, is very limited. Involvement by Bank staff will, therefore, strengthen the design and implementation of research in the following areas:

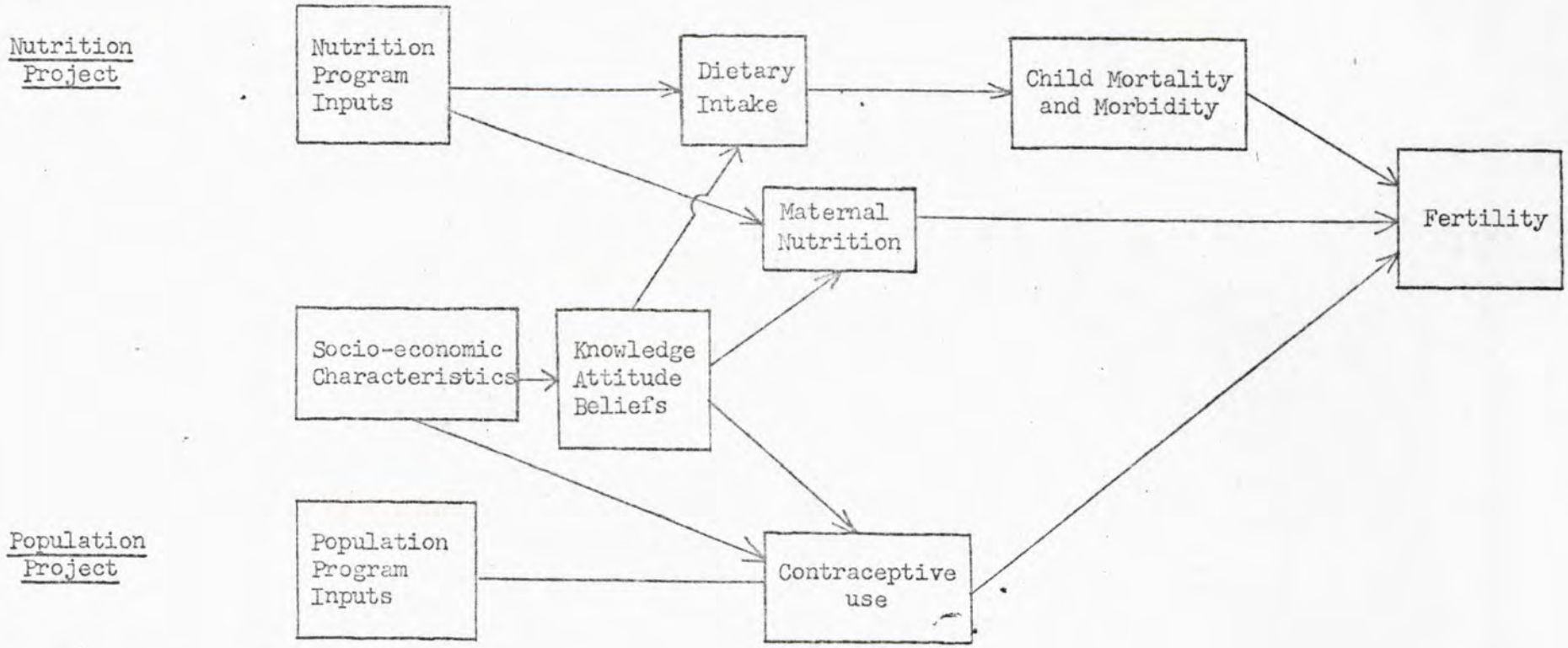
(a) development of suitable indices for socio-economic characteristics;

(b) identification of the most cost-effective ways of delivering family planning and other services, and, in particular, determination of the relative effectiveness and utilization of multi-purpose and single-purpose workers and facilities;

(c) development of simulation models to analyze the costs and benefits of a wide range of incremental programs that were not included in the field trails; and

(d) testing of the inter-relationship of family health, nutritional and educational status and fertility behavior in the light of recent economic theories on household behavior.

THE RELATIONSHIP BETWEEN NUTRITION AND POPULATION PROPOSALS



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

# OFFICE MEMORANDUM

TO: Member of the Research Committee DATE: September 24, 1975

FROM: Ravi Gulhati, Development Economics

SUBJECT: Proposed Research on Narangwal Population and Nutrition Studies

1. We have decided to submit Narangwal Project to the Research Committee after a great deal of soul-searching. On the face of it there are two reasons why this study should not be financed by the Bank:

- the main research contractor will be the Johns Hopkins University and normally such an institution ought to be able to get funds elsewhere;

- the research has been underway for a very long time and there was no previous Bank input in the experimental design or the mode of implementation in the field.

2. Despite these weighty arguments, we are submitting the project because we are convinced that:

- the Narangwal data-set collected painstakingly from 1967/8 to 1974 provides a unique opportunity to explore now a number of questions which are of key importance to the Bank's population, health and nutrition work;

- in the absence of Bank financial support, it is likely that the Johns Hopkins research team will disperse before resources are found to exploit fully the Narangwal data;

- input from Bank staff is necessary to extend the analytical framework visualized by Johns Hopkins researchers.

3. Bank financial support was first requested in April 1975. The plan of work proposed by the Johns Hopkins team has already undergone significant change as a result of several discussions with Bank staff. The latest version of the proposal was received very late last week. Although the presentation does not do it justice, the research plan put forward now is a viable one and deserves Bank support.

RGulhati/yvw

Mr. Ravi Gulhati, Development Econ. September 26, 1975

K. Kanagaratnam - PNPDR

Proposed Research on Narangwal Population and Nutrition Studies

I have indicated support for the proposal to the Research Committee to finance the analysis of data collected from the Narangwal Population and Nutrition Research Project. I have done so in the recognition that the data from this project are unique in that they concern the inter-relationships of nutrition, health and family planning over an appreciable period of time in a reasonably designed field experiment. The research subject areas mentioned in the final paragraph of Section B are of great interest to this Department. However, I must express my reservations concerning whether the data concerned have been collected in such a way that will permit the analyses envisaged. I feel strongly that the Bank will have to monitor closely the quality of the data used in the analyses and the structure of the research undertaken to ensure its accuracy and relevancy.

cc: Mr. Baldwin o/r
Mr. T. King

IV Messenger:KK/bli

# PROPOSAL FOR ANALYSIS OF THE NARANGWAL POPULATION PROJECT

---

Department of International Health
The Johns Hopkins University
School of Hygiene and Public Health
Baltimore, Maryland
1975

# PROPOSAL FOR ANALYSIS OF THE NARANGWAL POPULATION PROJECT

## I. OBJECTIVES

A. To conduct detailed analysis of the large amount of data gathered in the long-term prospective population study at Narangwal Rural Health Research Center. This analysis will measure the impact on family planning utilization and on fertility of:

1. the differential effect of various components of health services which were tested in a systematic experimental design?

2. cultural values and beliefs as measured in two rounds of questionnaires, especially focussing on beliefs related to child survival;

3. the dynamics of social change relating to variables such as education of women, social status and village organization; and

4. estimates of the rapid economic development which was occurring in the Punjab during the study.

B. To use data from this analysis to develop policy alternatives relating to the most effective linkages between family planning efforts and other development sectors.

## II. CONCEPTUALIZATION OF FRAMEWORK FOR ANALYSIS

### A. Conceptualization

Out of the confrontations at the Bucharest World Population Conference and subsequently, there has emerged a general concensus that population programs need to be developed in the context of social and economic development. The interactions between population and various development sectors have become increasingly important to planners and policy makers. A salutory appreciation is growing that simplistic approaches are making some contributions but that now it is time to face long term issues that recognize the complexity of population determinants. Research to be relevant has the challenge of sorting out causal variables and the relative strength of the interactions.

The fact is that most of the program linkages that have been proposed are far from being ready for implementation. Some of the important associations such as with the ability to plan for the future or improving the status of women are eminently desirable but difficult to achieve social objectives. Much more needs to be learned before they can be manipulated as intervention measures for demographic objectives. In fact, little is known about the desirable sequences or combinations of any development activities.

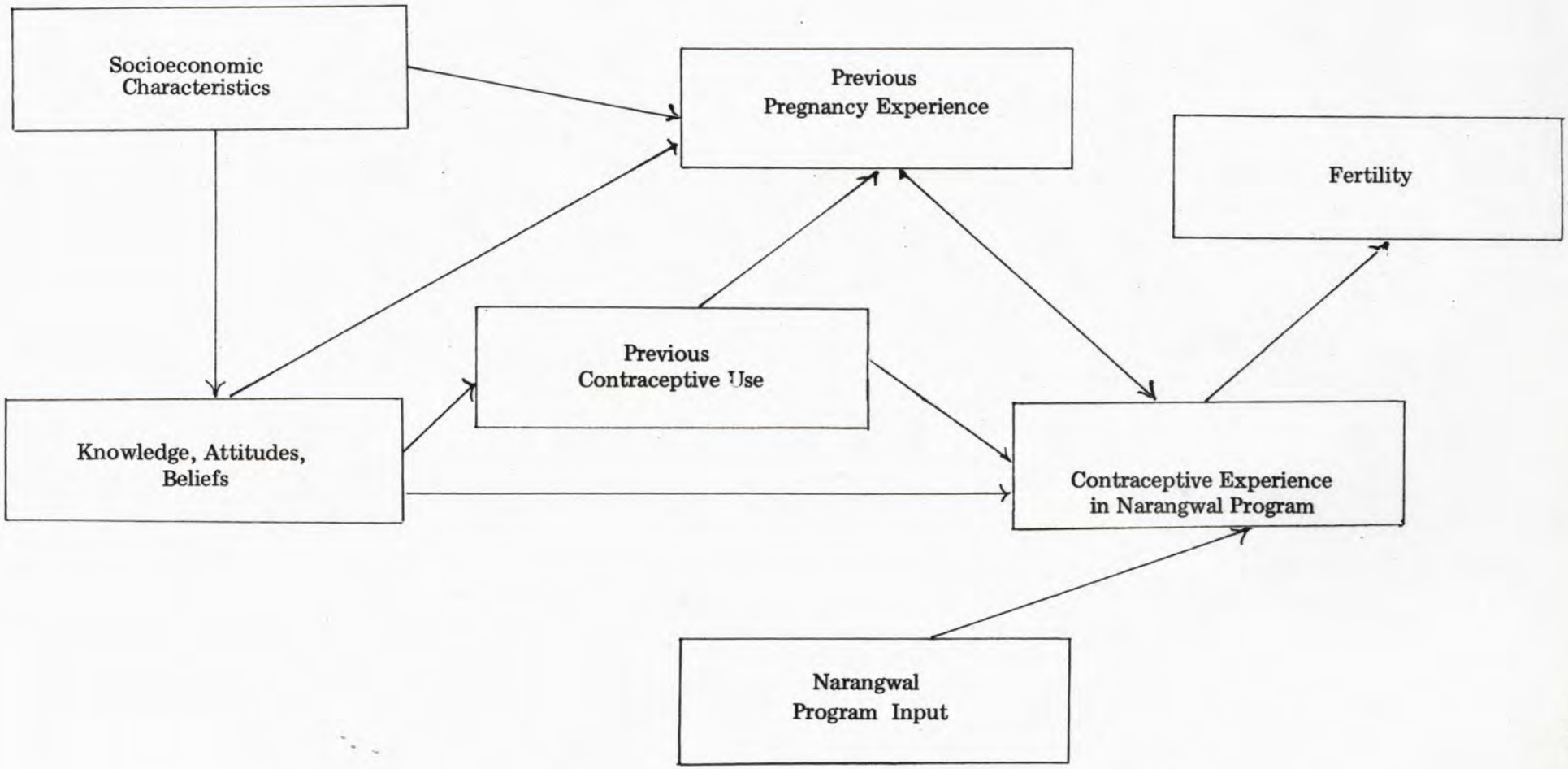
The integration of family planning with health and nutrition is the most obvious program linkage now available. It fits with existing national policy in most countries and makes sense to village people. There are program efficiencies which can be achieved in combining services which have so much in common as they relate to village women and in access to homes. There are, however, also tremendous problems. Ministries of health are notoriously inefficient and services are generally inadequate in coverage and quality. Repeatedly around the world it has been found that merely adding family planning responsibilities to maternal and child health services may cause serious deterioration of both. In addition to the practical operational issues of how to operate cost/effective services, there are many unanswered questions about fundamental causal linkages between the interacting forces.

In India during the mid-1960's, it became evident that research was needed on the integration of family planning with health and nutrition. The mass campaign for IUD insertions had produced a backlash and it was evident that innovative efforts to build good services needed serious study. The collaborative research at Narangwal was designed specifically to answer questions which have now become especially acute. The data that were gathered over several years are available for detailed analysis. Some of the fundamental policy questions to which this analysis can contribute are delineated in the conceptual framework shown in the model in Figure 1.

The model is presented along with a series of hypotheses because our data are unique in providing an opportunity for simultaneous analysis of multiple variables. Associated with the arrows connecting the boxes in the model are several important questions. It will be possible to quantify the relative strength of particular associations as defined in the hypotheses which follow the questions.

FIGURE 1

CONCEPTUAL FRAMEWORK
FOR
OVERALL SYSTEM ANALYSIS



B. Policy Related Questions To Be Included In Analysis - (associated with arrows in Figure 1)

Work on this full list assumes that the forthcoming proposal to NIH is accepted. Priority will be given to subject areas 1, 5, 6, and 7, and if the NIH grant is not forthcoming, research on the other subject areas will have to be reduced.

1. Socioeconomic characteristics

   a. What are the socioeconomic characteristics of persons who:
      1) have particular patterns of knowledge, attitudes and beliefs about family size and family planning;
      2) have particular patterns of pregnancy experience; and
      3) have or will become active users of family planning?

   b. What are the dynamics and time sequences of the effects on family planning and fertility variables of socioeconomic characteristics such as:
      1) family income;
      2) caste;
      3) education;
      4) housing;
      5) established family wealth as distinct from current income;
      6) occupation; and
      7) marriage patterns?

2. Knowledge, Attitudes and Beliefs

   a. What are the effects of knowledge, attitudes and beliefs about fertility and family planning on the following:
      1) prior pregnancy experience;
      2) previous contraceptive use;
      3) contraceptive experience in the various experimental groups of the Narangwal pattern?

   b. What are the effects of knowledge, attitudes and beliefs as they relate to the following specific topics:
      1) approval of family planning;
      2) attitudes to particular methods of family planning;
      3) sources of information about family planning;
      4) perceptions of child survival;
      5) family size expectations and awareness of population trends; and
      6) knowledge of specific contraceptive methods and their complications?

3. Previous Contraceptive Use

   a. What are the effects of previous contraceptive use on:
      1) prior pregnancy experience; and
      2) subsequent willingness to use contraceptives in the various experimental groups of the Narangwal pattern?

b. What are the effects of previous experience with the following family planning methods:
   1) traditional folk methods of dubious effectiveness such as getting out of bed to walk around a tree, or to wash superficially;
   2) traditional methods of known effectiveness such as withdrawal or the old Ayurvedic pattern of rhythm or periodic abstinence during the first half of the intermenstrual cycle;
   3) biologic methods such as lactation as influenced by nutrition; and
   4) contraceptive methods that were available prior to program?

4. Pregnancy Experience

   a. What are the effects of prior pregnancy experience as measured by:
      1) age and parity of mother;
      2) sex of children; and
      3) (perhaps more important as a specific hypothesis which the project was set up to test) the effect of child mortality at various ages and by sex of child?

   b. How does previous pregnancy experience influence behavior as related to contraceptive experience in the Narangwal program both in terms of
      1) acceptance of family planning; and
      2) continuing and effective use of family planning?

5. Experimental Inputs

   a. What were the effects of the differential experimental inputs of the Narangwal program on what we can learn about using the child survival hypothesis in practical development of national family planning programs
      1) by deliberately integrating health and family planning measures to ensure survival of children, and using child health entry points for family planning to convince parents that it is safe to have fewer children;
      2) by using reduction of morbidity and improved growth as further indicators of improved child health to increase the confidence of parents in child survival; and
      3) by measuring attitude changes related to survival of children?

   b. What can we learn about how maternal care that can be integrated with family planning and the effect of women's services entry points on acceptance and use?

   c. What are the best practical service procedures at the lowest cost and with minimum trained manpower for reaching all village homes with integrated services?

6. Contraceptive Experience in the Narangwal Program

   a. What were the patterns of contraceptive experience in the Narangwal program as they related to the specific program inputs of the experimental design?

   b. What were the patterns of contraceptive experience in the Narangwal program in terms of sequence and duration of use of particular family planning methods?

7. Fertility

   a. What resultants in family and village community fertility emerged in terms of the various measures of fertility? (This includes the evaluation of multiple methods of collecting and analyzing data that were tried simultaneously and can be tested for their usefulness for large scale use in a simplified methodology.)

   b. What resultants in family and village community fertility emerged in terms of many of the variables discussed above, such as
      1) income or wealth;
      2) education or occupation;
      3) prior pregnancy experience;
      4) prior child health and survival;
      5) satisfaction with services; and
      6) cost of services?

C. Hypotheses

1. When the project started we stated the hypotheses on which the experimental design was based as follows:

The general hypothesis being tested in the present research program is that attitudes towards and acceptance and practice of family planning will improve when it is combined with the provision of health services.

The research design tests four specific sub-hypotheses under this general hypothesis:

   a. Contraceptive practice will be greater if family planning services (FP) are combined with general health services for women aged 15-49 (WS) than if FP is provided alone.

   b. Contraceptive practice will also be greater if FP service is combined with health services for children aged 0-3 (CC), than if FP is provided alone.

   c. Contraceptive practice will again be greater if FP is combined with both WS and CC, and this combination will produce an increment in FP practice greater than the sum of effects observed under hypotheses (a) and (b).

d. A decline in infant-child mortality will lead to increased contraceptive practice because an increased expectation of child survival will result in a decrease in the number of births desired by parents.

2. Those hypotheses still stand as the basic framework of analysis. In addition, from the questions related to the model we can test the following hypotheses in the forthcoming analysis:

a. Controlling for other factors differential rates of FP practice exist among various socioeconomic groups as defined by income, caste, education, housing, occupation and marriage patterns.

b. The dynamic patterns of change in knowledge and attitudes about FP and beliefs about child survival are more related to practice of family planning for purposes of spacing than for purposes of family size limitation.

c. Transition from less effective methods to more effective family planning methods is directly related to duration of use and intensity of family planning followup services.

d. Age and parity of mothers and sex of both living and dead children are useful indicators of couples' relative priority for family planning.

e. Provision of family planning services by multipurpose health workers is more effective when routinized by the use of FP entry points in child care and women's services.

## III. THE NARANGWAL RURAL HEALTH RESEARCH CENTER

Two parallel field projects were conducted during the period 1966-1974. A project on the Interactions of Malnutrition and Infections in Weaning Age Children funded by WHO and NIH (AM-11047) required two years of tooling up, followed by four years of field work. A project on the Integration of Family Planning and Maternal and Child Health required three years of tooling up and then five years of field work from 1969 to 1974. This was funded by AID, HEW PL-480 funds, WHO, the Indian Council of Medical Research and various private funding agencies.

In both projects, groups of villages were followed longitudinally with complete and extensive data gathering to measure the impact of differing service inputs. Input-output-outcome measurements were made within a controlled experimental design to get

cost/benefit measurements on various combinations of health and family planning interventions. All services were provided by auxiliaries within an organizational system that can be applied in the national programs of countries such as India. As each of the service packages was evolved, measurements of the specific inputs were made so as to get rapid feedback and improvement.

The groups of villages in the two research projects are indicated in Figure 2. The Study of Malnutrition and Infections had four groups of villages which included: nutritional supplements; infection control; both nutritional supplements and infection control; and a control group. The Project on Integration of Family Planning and MCH had five groups of villages which received: child care and family planning; maternal care and family planning; both child care and maternal care and family planning; family planning alone; and a control group of villages. One group of villages was included in both projects.

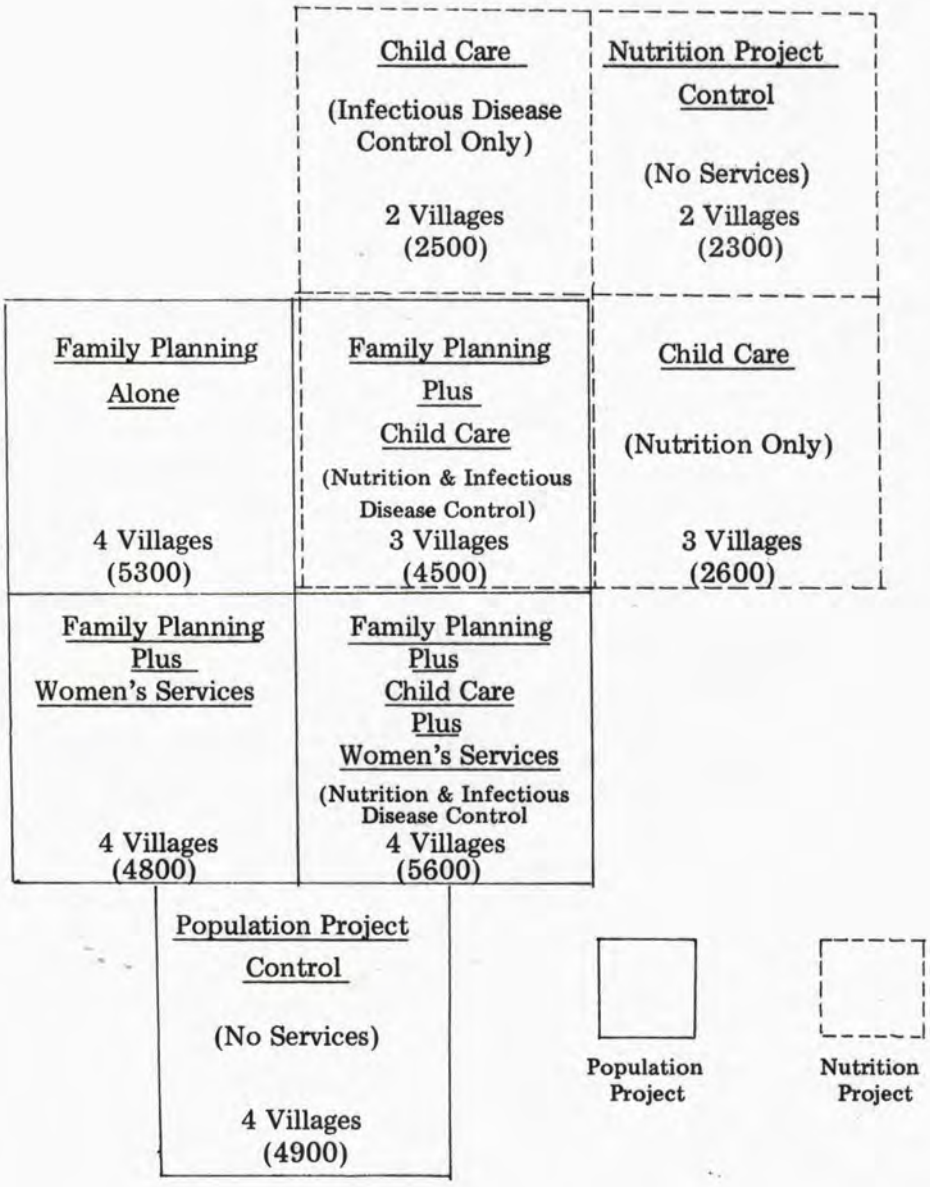
## IV. BACKGROUND INFORMATION

Few fields of development activity have so rapidly accumulated a massive literature of rhetoric and some research as population activities. Policy determination and program development depended on population experts who tended not to have had the benefit of a great deal of practical experience. Population growth had been almost entirely a subject which was of interest only to academic research workers in fields such as demography, social science, economics and public health.

Because of the urgency given to rapid program development in the past two decades, there has been a tendency to search for simplistic solutions. A great challenge now is to go back to developing basic understanding of the causal relationships between fertility and variables which can be manipulated to modify reproductive patterns. The Bucharest World Population Conference posed basic questions about the relationships between population growth and development.

The first need was to get descriptive information and since many demographers came from a social science background there was a tendency to focus on statistical analysis of population data and on household surveys. Most commonly used have been KAP surveys

FIGURE 2




Experimental Design of the Narangwal Population Project

In Relation to the Nutrition Project

(Knowledge, Attitude and Practice Surveys). Many were done around the world and because of the stimulus of the Population Council (Berelson 1966) there was some effort to get uniformity in methodology to provide some comparability. These KAP surveys made a real contribution at first in showing that people were considerably ahead of their leaders in their willingness to accept and promote family planning. The surveys helped to give leaders courage to proceed with statements of population policy and implementation of large scale programs. The survey information, however, tended to contribute little to understanding of the dynamics of fertility change.

More sophisticated surveys are being done now in an effort to define causal relationships (Sprehe 1974). By collecting data on a wide range of variables and using regression and multivariate techniques it is has been possible to demonstrate an increasing number of associations. Typically, however, the parameters observed are limited to those that interest a particular research worker. When an association is demonstrated it remains hard to place it in perspective with other variables that might be either causal, intervening, or incidental. Among the many variables it is of particular interest to measure their relative strength of association and direction of causal linkage. The fact is that there are very few comprehensive studies looking at multiple variables prospectively using data gathered under field circumstances.

To understand causal relationships among variables that can be changed, it will probably be necessary to conduct field trials of the impact of specific interventions (WHO TRS 1970). Purely observational studies under natural field conditions give some understanding of underlying variables. Often, however, the associations that are defined are between variables that cannot be changed or may themselves be dependent on a general process of development. When they do change spontaneously usually there are many interacting variables that change at the same time. For instance, a great deal of attention has been given to the role of women and the possibility of expanding their occupational opportunities as a means of providing alternatives to child bearing. This is a well established and long term social goal and deserves to be promoted in its own right. The experience thus far in trying to promote women's employment as a means of limiting fertility has, however, had the unfortunate tendency to promote the exploitation of women. Employers cooperate because they can pay women less than they would pay men. Men agree because they can relax while the women bring in

an income. The poor women, however, have to work all day on a plantation or in a fish factory and then have to go home in the evening and do all of the work for the household that they would normally have had all day to do. In practical program development interventions must be studied, not only for their direct impact on fertility, but also for their intricate and unexpected interactions with other social and economic variables. It is desirable to include a wide variety of measurements and to have comparison or control groups to quantify the multiple changes that are simultaneously taking place in society.

The many family planning programs which have been developed in recent years have included only minimal efforts to collect data for evaluation and very few have had an actual research component. Some of the most interesting current efforts combine family planning with interventions in other development sectors. A number have been associated with educational efforts starting with the Taichung experiment in Taiwan (Freedman and Takeshita 1969). A few studies are attempting to measure the impact of various imaginative approaches to providing economic or social incentives for having a small family (Ridker and Muscat 1973; Wang and Chen 1973). More numerous are studies in which a family planning service is linked to maternal and child health services (WHO TRS 1971). One of the more successful such activities has been at Etimesgut in Turkey (Fisek 1974). A birth rate decline from 1967 to 1973 from 35.1 to 29.4 was recorded. In India, there have been a variety of field trials. At Gandhigram, combined family planning and MCH services produced a significant decline in fertility but there was no control group. At Singur (Studies in Family Planning 1963) between 1956 and 1961, in a test group of villages the birth rate fell from 45 to 37, while in the control group it fell from 46 to 43. Several years later, however, the rates for the two groups had equalized.

The project that has the most direct relevance to this research was conducted at Khanna only 26 miles from Narangwal. Between 1956 and 1960, with a followup survey in 1969, a tightly controlled research project was conducted in which foam tablets were offered to one group of villages. Detailed measurements were done which provided much understanding of the dynamics of fertility change. No differences were observed, however, in the rate at which fertility fell in the experimental and control groups. The study summarized the variables that might be changed to improve the impact of the family planning programs

and reported them in the following rank order: high risk of losing children; ignorance of birth control; early age at cohabitation; no occupations outside the home for women; high marriage rates and low status for women; reduced breast feeding; acceptance of low standard of living; need for sons; etc.

It has suddenly become popular to set up demonstration projects integrating health and family planning services. Examples are the Population Council's Taylor-Berelson projects in four or five countries, the AID/APHA DEIDS projects, activities being promoted by WHO in several countries, the projects stimulated by the Christian Medical Commission, and several others. A serious limitation of these projects is that they seem to assume that they know the answers and only have to conduct a demonstration to show that the proposed pattern of services will work. Measurement is usually restricted to rather simple evaluation data for feedback to improve services. It will be difficult to get understanding of causal relationships and strength of interactions between variables from these studies since there is no conceptualization of experimental design or testing of hypotheses or models built into most of them.

## V. DATA AVAILABLE FOR ANALYSIS

A total of 22 villages in the population project had over 30,000 population (four more were only in the Nutrition Project). The following surveys were carried out systematically:

Longitudinal Surveys

| | | |
|---|---|---|
| Family Planning Acceptance | 1969-74 | 8 villages |
| | 1971-74 | 3 villages |
| | 1972-74 | 4 villages |
| Fertility Survey | 1969-74 | 8 villages |
| | 1971-73 | 7 villages |
| Vital Statistics — Births and Deaths | 1969-74 | 22 villages |
| | 1972-74 | 4 villages |
| — Marriages | 1972-74 | 26 villages |
| Morbidity of Children | 1969-73 | 10 villages |
| Anthropometric Measurement of Children | 1969-73 | 14 villages |
| Abstract of Service Records | 1969-74 | 18 villages |
| (qualitative & quantitative) | 1972-74 | 4 villages |

( continued )

Longitudinal Surveys (continued)

| | | | |
|---|---|---|---|
| Work Sampling Studies | | 1971 | 18 villages |
| | | 1974 | 15 villages |
| Abstract of Cost Information | | 1969-73 | 7 villages |
| | | 1969-74 | 11 villages |
| | | 1972-74 | 4 villages |

Cross-Sectional Surveys (approximately every 2 years)

| | | | |
|---|---|---|---|
| Baseline Census of Population | | 1967-68 | 22 villages |
| Second Round Census | | 1971 | 22 villages |
| | | 1972 | 4 villages |
| Third Round Census | | 1973 | 26 villages |
| Pregnancy History and | 1st round | 1969 | 22 villages |
| Reproduction Variables | 2nd round | 1971-72 | 26 villages |
| | 3rd round | 1974 | 4 villages |
| Attitudes and Beliefs | 1st round | 1969 | 22 villages |
| About Family Planning | 2nd round | 1971-72 | 26 villages |
| | 3rd round | 1974 | 4 villages |
| Knowledge and Practice | 1st round | 1969 | 22 villages |
| of Family Planning | 2nd round | 1971-72 | 26 villages |
| | 3rd round | 1974 | 4 villages |
| Socio-Economic Survey | 1st round | 1967-68 | 22 villages |
| on Households | 2nd round | 1971 | 22 villages |
| | 3rd round | 1972 | 4 villages |
| Health Care Utilization | 1st round | 1973 | 26 villages |
| Survey | 2nd round | 1974 | 19 villages |

All of this information was coded in India and transferred to IBM cards with subsequent taping for transport to Baltimore. These tapes have now been edited sufficiently to get basic analyses completed. A report is being prepared for AID on the findings most relevant to the original experimental design but the support requested here is for a more complete analysis.

## VI. RESEARCH DESIGN RELATED TO THIS PROPOSAL FOR DATA ANALYSIS

The large amount of information accumulated from a defined population offers a considerable resource for more complete analyses than have been possible within the time and funding that have been available heretofore. When the projects were planned, data

collection was specifically designed in a format to permit multiple ancillary analyses of great intrinsic importance. The effort and investment in prospective field research is so great that the maximum scientific use should be made of data that have been so laboriously gathered.

In consideration of the multiple types and sources of information included in the study, the analysis team at Johns Hopkins has been organized into five overlapping task groups. (A sixth task group has been concerned specifically with the nutrition component of the study discussed in a separate proposal.) The five task groups have dealt with the following study components:

Group I: Definition of Total Population Under Investigation. This group has been concerned with the size and basic socioeconomic and demographic characteristics of the population studied.

Group II. Attitude and Beliefs. Population attitudes toward family planning and beliefs concerning changing probability of child survival, population growth and communication methods have been investigated in relation to contraceptive experience.

Group III. Program Input. The specific services provided, the allocation of personnel effort, and costs have been the focus of this group.

Group IV. Knowledge and Practice. This group has analyzed knowledge of contraception and the practice of specific methods of family planning.

Group V. Fertility. The effect of contraceptive use on fertility patterns has served as the focus of this group's efforts.

The above organization has permitted detailed analysis of the relevant system components while bearing in mind the overall system and its dynamic linkages. The overall system has been viewed in conventional terms of systems analysis: (1) basic conditions of the population with respect to health and fertility status; (2) controlled program inputs designed to improve this status; (3) process in terms of health and family planning services provided; and (4) impact on fertility and health status.

Summarizing the foregoing discussion, the Narangwal projects have provided a wealth of data of both a repetitive cross-sectional and longitudinal nature. Analysis of these data should serve to isolate critical variables and to assess the dynamics of change in them over

time. Moreover, the wide range of information collected permits their organization into data sets representing major sub-systems which can be linked in an overall systems analysis.

This leads to three phases of analysis in the proposed study design: (1) data consolidation, reorganization, and sub-system analyses; (2) overall systems analysis and program indications; and (3) application of the results of analysis to community assessment and the resolution of critical policy questions. These phases of analysis are summarized below and consolidated in detail in Section VII.

A. Data Preparation and Sub-system Analyses

Work to date has concentrated on analysis within the various sub-systems of concern to each task group with the aim of identifying key variables, combining them into appropriate indices, and describing fundamental associations. This has led to a systematic reordering of data sets, thus permitting under the present proposal more sophisticated in-depth statistical analyses designed to identify multivariate cause-and-effect associations. At the next stage of the analysis we also propose to examine sub-system dynamics, e.g., changing socioeconomic status and its effect on contraceptive behavior.

A detailed list of proposed analyses is presented in Section VII showing accomplishments to date and those that remain to be done. In summary, these analyses cover the following areas:

1. Measurement of family social and economic characteristics and patterns of change indicated by repeated household surveys.

2. Measurement of attitudes and beliefs and patterns of change as indicated from repeates surveys.

3. Detailed assessment of human, physical, and financial resource inputs related to service programs, individually and in combination.

4. Careful quantification of family planning utilization data. These have already been organized onto computer tapes in the form of a women's register so that a longitudinal contraceptive history is available.

5. Appraisal of health status and health benefits under different programmatic conditions reflected in the experimental design.

6. A dynamic appraisal of fertility status based upon both a life table approach to changes in parity and analysis of the components of pregnancy intervals, open and closed.

B. Overall Systems Analysis and Program Indications

An important product of the foregoing sub-analyses will be a consolidated set of critical variables and indices. As a result, the comprehensive analysis of the total system under study will become manageable. The purpose of such an analysis will be to relate specific program effects to input requirements in view of population characteristics which either facilitate or inhibit program effectiveness. A clearer understanding of these relationships should contribute to more effective programmatic decision making. In particular, the dynamic systems analysis envisioned will permit appraisal of both the immediate and secondary impact of program intervention at specific points in the system. For example, should a couple who has used contraception for child-spacing be approached differently for purposes of family size limitation than one with no previous contraceptive experience?

The conceptual framework for the overall analysis is represented by the model in Figure 1. The system dynamics is shown by the arrows indicating direct and indirect linkages. For example, contraceptive experience in our program could be affected directly by knowledge, attitudes and beliefs, or indirectly through the latter effect upon previous contraceptive use. The issue is whether favorable program experience is largely a reinforcement and improvement of previously established knowledge, attitudes and beliefs or whether it is mainly a direct reponse to a receptive state of mind not previously translated into contraceptive behavior.

As indicated above, the specific variables and indices to be employed in the overall analysis will be determined in the course of conducting the sub-analyses. In reviewing the results of analysis to date, however, we expect the following types of information to be useful under each of the headings included in the diagram:

1. Socioeconomic Characteristics
   - Religion-caste
   - Education-occupation
   - Income and wealth

2. Pregnancy Experience
   - Age-parity
   - Living sons

3. Knowledge, Attitudes, Beliefs
   - Attitudes toward family planning
   - Desired family size, composition
   - Perception of child survival
   - Knowledge of family planning and specific methods

4. Previous Contraceptive Use
   - Previous use of methods
   - Current use of methods

5. Narangwal Program Input
   - Program service contacts
   - Other utilization

6. Contraceptive Experience in Narangwal Program
   - Methods used
   - Methods transition profile
   - Duration of use

7. Fertility
   - Live births
   - Other pregnancies

C. Methods of Community Assessment

Looking beyond the analysis of the Narangwal experience, we recognize the need for more generalized and streamlined methods of community assessment of health and demographic status. The proposed activities under "A" above will lead to a consolidated list of critical variables and indices in this regard. Work under "B" will further lead to a clearer understanding of the potential use of such information for programming. Thus we expect to be able to apply the knowledge gained from the Narangwal analyses to development of generalized recommendations for community assessment that will serve both as a means of appraising current status and of suggesting possible alternatives and priorities for intervention. Details of this methodology development must, of course, await the results of the Narangwal analysis itself.

D. Policy Issues

Findings from these analyses can be fed directly into policy definition. Many questions are being asked that focus on cost/benefit issues in allocation of national and

international resources. Too often the data that are available from surveys or reported statistics are focussed only on particular parts of the complex interactions between health, population and development. The information available for analysis here is unique in its coverage of sectors, in its being longitudinal and prospective and in having both cost and benefit components. By asking specific questions on particular interactions these data can provide answers within the broader matrix of other interactions. Once these data are in shape for specific analyses they can also be used by other research workers to answer their questions.

## VII. DETAILED STATEMENT OF PROPOSED ANALYSIS

### A. General Statement of What Has Been Accomplished

In general, what has been accomplished in the one year for which we have had carry-over funding from AID has been the following:

1. Cleaning and editing all of the tapes.

2. Cross checking the editing of certain files to make sure identification numbers tally; but this has not been completed for all tapes.

3. Marginals have been produced for all of the basic analyses giving data on the major items of information relating to the basic experimental design.

4. Cross tabulations of data within information sets; for instance, some of the basic items of information appearing on a particular questionnaire have been tabulated against other information in that questionnaire.

5. A few cross tabulations between data sets have also been done, especially for basic demographic information such as age and caste.

### B. General Statement of What Remains To Be Done

Having gotten much of the preparatory and descriptive analytic work out of the way, it is now possible to focus on the more important analytic problems. It should be possible now to search for explanatory variables and begin to measure their strengths.

An effort can be made to trace causal relationships. Many methodological issues need to be resolved and if possible some general indices, especially for prediction, will be tested.

A separate proposal is being submitted to NIH to cover the more biological and sociological aspects of this research. The items to be included in that proposal are included in the listing that follows but they are indicated by being enclosed in parentheses.

TASK GROUP I — Population Characteristics

| Done | To Be Done | |
|---|---|---|
| | Sub-system Analyses | Relation to overall Systems Analysis |
| 1. Definition of denominators for rate calculations *(Tables II.A.1, II.A.2)<br>2. Marginals of socioeconomic information by cohort and village. Cross tabs by caste. (Tables II.A.3, II.A.4) | 1.1 Indices of economic status of families need to be developed. Since we have a rather complex set of assets data in addition to basic information on sources of income, we expect that this will be a rather complicated analysis. The composite indices will be based upon both statistical analyses of correlations among variables and the construction of rational models. The indices will have separate components representing income, wealth, and social status. | Socioeconomic characteristics |

TASK GROUP II — Attitudes and Beliefs

| | | |
|---|---|---|
| 1. Marginals by village and cohort (Tables II.D.1 - II.D.6) | (1.1 Multivariate analyses for causal relationships controlling for other variables.)<br>(1.2 Development of transition matrices of change between Round 1 and Round 2 and application of other techniques of panel analysis to define and quantify the structure of change) | Knowledge, Attitudes and Beliefs according to Socioeconomic Characteristics in relation to previous Pregnancy and Contraceptive Experience as well as subsequent Experience in the Narangwal Program |

*Table numbers refer to findings presented in the Narangwal Population Project Report of September 1975.

TASK GROUP II — continued

| Done | To Be Done | |
|---|---|---|
| | Sub-system Analyses | Relation to overall System Analysis |
| 2. Cross-tabulation of AB variables against child mortality, caste, age, husband's occupation and education, age at marriage, living children and sons (Tables II.D.7-II.D.20) | (2.1 Identification of the dimensions of change in AB over time through a sequential analysis of attitudes toward family planning and perceptions of child survival on the one hand and utilization of family planning services on the other. The intent is to determine the extent to which attitudes and beliefs determine behavior ) | |
| 3. Cross-tabulation of common variables in Rounds 1 and 2 to identify the degree of change in measures between the two points in time (See above tables.) | (3.1 Analysis of relation between changed AB of individuals and knowledge variables) | |
| | (3.2 Analysis of relation of changes in AB to receipt of services) | |
| | 3.3 Determination of effect of exposure of mass communications on family planning acceptance and continued utilization | |
| | 3.4 Analysis of attitudes of dropouts among contraceptive users. This will include a determination of the major concerns of dropouts from particular methods and changes in attitude through use of specific methods. | |

## TASK GROUP III — Program Inputs

| Done | To Be Done | |
|---|---|---|
| | Sub-system Analyses | Relation to overall Systems Analysis |
| **Work Sampling** | **Work Sampling** | |
| 1. Time inputs by function, activity, and research component related to population base, minutes per week per 1000 pop. — by each category of staff and by total team (Tables III.A.1-III.A.32) | 1.1 More detailed activity analysis, e.g., linking interstaff activity to other types of activities | Narangwal Program Input in Relation to Impact on Knowledge, Attitudes and Beliefs and Program Results |
| 2. Service contacts by function and activity to population base (Tables III.A.33-III.A.35) | 2.1 Analysis of place of delivery of service, e.g., for determining effectiveness of home versus clinic care | |
| **Service Records** | **Service Records** | |
| 3. Total recorded visits or contacts categorized by year, worker and type of service in each cohort - related to population base (Tables III.B.1-III.B.5) | 3.1 Development of individual records and analysis of the dynamics and content of the service delivery system | |
| 4. Specific details of family planning follow-up visits by method used (Table III.B.6) | 4.1 Analysis of the congruence between services actually provided in relation to the prescribed service program — standing orders | |
| **Utilization Surveys** | **Utilization Surveys** | |
| 5. Frequency of service contacts by type and provider in all villages - including control villages (Tables III.C.1-III.C.2) | 5.1 Analysis of differential utilization of services depending on type of problem | |
| 6. Persons ill per fortnight by age group, proportion consulting, source of consultation, reasons for not seeking treatment when medical care "needed" (Tables III.C.3-III.C.7) | 6.1 Assessment of the perception of need for services - comparison of the individual's assessment with the professional determination of need as already established by a decision rule based on type of problem, severity and duration | |

TASK GROUP III — continued

| Done | To Be Done: Sub-system Analyses | To Be Done: Relation to overall Systems Analysis |
|---|---|---|
| 7. Reasons for choosing the particular service, location of the service and number of visits (Tables III.C.8-III.C.17) | 7.1 Analysis of the inter-relationships between various factors such as location, distance, type of service to utilization | |
| Cost Analysis | Cost Analysis | |
| 8. Service costs by function, activity, and type of service for each year of the project (Tables III.D.1-III.D.5) | 8.1 Development of simulation models introducing varying assumptions about costs of a service package as well as contents of the package to determine related cost implications | |
| | 8.2 Attempt to calculate marginal costs related to adding various service components | |
| 9. Estimates of above service costs under government conditions (Tables III.D.6-III.D.10) | 9.1 Estimate of total health care costs related to service program in various settings, private and public | |
| Linked Analysis | Linked Analysis | |
| 10. Time per contact, unit costs of activities and services (Tables III.D.11-III.D.14) | 10.1 Compilation of activity content of contacts | |
| | 10.2 Comparison of perception of recipients and actual services generated | |
| | 10.3 Development matrix of "needs" and comparison with services provided to Identify gaps | |
| | 10.4 Correlations of aggregated cohort input data to aggregated outcome measures | |
| 11. Cost/effectiveness determinations (Tables V.A.1-V.A.3) | | |
| 12. Time/effectiveness determinations (Table V.A.6) | | |
| 13. Service contact/effectiveness determinations (Tables V.A.4-V.A.5) | | |

## TASK GROUPS IV & V

### Knowledge and Practice of Family Planning and Fertility Changes

(Analyses relating to these two task groups are combined because of the close tie between cross-sectional KP information and longitudinal data on fertility obtained during the course of Narangwal Program implementation)

| Done | To Be Done | |
|---|---|---|
| | Sub-system Analyses | Relation to overall Systems Analysis |
| Knowledge and Practice | Knowledge and Practice | |
| 1. Awareness, knowledge, prior use and current use of different methods of family planning — estimation of levels at baseline and repeat survey (Tables II.C.1-II.C.13) | (1.1 Evaluation of cross-sectional data on family planning practice by comparison with longitudinal data)<br>(1.2 Assessment of validity of awareness and knowledge variables — using interview-reinterview data) | |
| 2. Changes in the above variables at individual level and differential change by service cohort (same tables as above) | | |
| Family Planning | Family Planning | |
| 3. Overall and age-specific ever-use and continuing-use of family planning during program operation (Tables IV.A.2-IV.A.5, IV.A.23, Fig. IV.A.1, IV.A.2) | 3.1 Calculation of duration specific probabilities of transition for different methods of family planning<br>(3.2 Development of a mathematical predictive model capable of estimating who is or is not likely to adopt contraception. This is achieved by considering two or more distinct groups such as users and non-users of family planning and relating the associated factors to use or non-use)<br>(3.3 Estimation of demographic impact of family planning practice)<br>3.4 Investigation of the gap between estimated demographic impact and the observed performance | |

| Done | To Be Done: Sub-system Analyses | To Be Done: Relation to overall Systems Analysis |
|---|---|---|
| 4. Number of use-episodes during program operation, methods accepted and length of use each time (Tables IV.A.1, IV.A.6) | | |
| 5. Pattern of switching from one method to another, reasons for switching and if discontinued completely the reasons for doing so (Tables IV.A.7-IV.A.14) | | |
| 6. Continuation rates of different methods of contraception (Tables IV.A.15-IV.A.18) | | |
| 7. Gross and net rates of discontinuation due to specific reasons under each method (Tables IV.A.19-IV.A.22) | | |
| Vital Rates | Vital Rates | |
| 8. Crude birth rates, G.F.R., T.F.R. (Tables IV.B.2-IV.B.5) | (8.1 Calculation of age-sex-marital status and religion-caste adjusted birth ratios)<br>(8.2 Estimation of registered and resident birth rates)<br>(8.3 Evaluation of different sources of birth data)<br>(8.4 Estimation of still birth rate, cause of death by age, sex differential in mortality, etc.) | |
| 9. Determination of age and parity specific birth rates, F.P. method specific birth rates, and calculation of numerator indices (Tables IV.B.6, IV.B.1, IV.C.1) | | |
| 10. Death data analysis (Tables IV.D.1-IV.D.9, Fig. IV.D.2-IV.D.4) | | |
| Fertility | Fertility | |
| | (1.1 Birth interval analysis)<br>(1.2 Estimation of postpartum amenorrhea and its rate in birth interval dynamics) | |

C. Specific Aims and Methods of Analyses

Having outlined what remains to be done, we now consider in greater detail how we expect to accomplish each of the identified tasks. This discussion is limited to those items (not in parentheses in the preceding listing) addressed in the present proposal. The numbering below conforms to that employed in the preceding section. For example, item I.1.1. below refers to analysis 1.1 of Task Group I in Section B above.

The proposed analyses represent our best current estimates of what can be accomplished. Realistically, however, we recognize that with the time and money available we will have to be selective and will consult with IBRD colleagues about choices. Certain proposed analyses will lead us down blind alleys, while others will produce unexpected results leading to further analyses, development of additional models or hypotheses, and the testing of some of them. In other cases improved methods of accomplishing the specified ends will undoubtedly emerge. It is quite possible, for example, that simple $\chi^2$ tests will lead in some cases to interesting and complex relationships worthy of more sophisticated statistical approaches.

I.1.1. The mass of detailed taped information has been consolidated into a limited number of variables which exhibited variability and validity at specific points in time. In addition a set of transition variables has been constructed from those which showed meaningful change between rounds of the cross-sectional surveys. The static variables will be organized into a general model of sub-indices representing assets, income, and social status. Mathematical weights will be determined from a discriminant analysis of family planning acceptors and non-acceptors. The derived weights will be checked for reasonableness and will be further tested against the Narangwal program experience. Analysis to date suggests that high-caste families tend to be relatively homogeneous land-owning cultivators, whereas low-caste families are more heterogeneous in the size and source of their income and its relation to physical well-being as measured by such factors as housing condition and environmental quality. It will be necessary, therefore, to recognize in the model the interaction between caste and socioeconomic status in order to examine differential effects of socioeconomic factors among different castes. This calls for a co-variance analysis, with caste serving as the co-variable. The analysis should indicate the relative importance of caste and cultural factors compared with socioeconomic conditions in determining family planning attitudes and behavior.

The transition variables are of interest in assessing the relevance of changed socioeconomic status to altered attitudes and behavior toward family planning. The question is whether "high" socioeconomic status is important in a static sense or whether "upward mobility" is the more critical factor. Since we have data from two rounds of socioeconomic and attitudinal surveys and longitudinal information on family planning acceptance and utilization, we can compute differential probabilities of acceptance and profiles of utilization among various socioeconomic groups whose status has not changed in comparison to others who had achieved similar status through change. Again, variables of change will serve as co-variables in the least-squares analysis.

II.3.3. $\chi^2$ analyses of acceptance against source of knowledge of family planning will be conducted, controlling for other important variables affecting acceptance. Certain patterns of continuing utilization and change of methods will be similarly examined. For example, users will be classified according to length of use, and these user groups will be analyzed for exposure to mass communications as reported in each of the attitude-belief survey rounds. In addition, transfers from traditional to modern methods of contraception will be compared to initial users of modern methods.

II.3.4. Categories of Round 1 versus Round 2 attitudes will be formed and differences in dropout rates among categories will be tested by the calculation of F-ratios.

III.1.1. Differential distributions of activity times by service program will be analyzed by $\chi^2$. Significant differences will be further investigated to determine patterns of difference.

III.2.1. A regression model will be developed, with number and location of service contacts as the independent variables and family planning acceptance and practice as the dependent variables. This will establish the importance of frequency of contact in comparison with the location of the contact.

III.3.1. Since detailed individual service records have not yet been compiled, the initial analysis will be exploratory and subsequent ones are tentative. A representative set of service profiles will be compiled to seek evidence of multi-purpose use of services in contrast to single-purpose use. Differences among cohorts in service patterns will also

be examined. Then we expect to conduct multiple regression analyses of specific types of services utilization against population characteristics. Finally, analyses of composite services utilization will be conducted against population characteristics in order to determine whether decisions to utilize specific services are independent of one another or whether their interaction must be considered in service models. These analyses will be especially useful in testing for the multiple uses and benefits from comprehensive care programs when they are made available.

III.4.1. Standing orders indicate appropriate courses of action to be taken under specified conditions. Certain indicator conditions will be examined with respect to the percent conformance to standing orders. Quality control limits will be established and "out-of-control" conditions will be examined for differences by worker and category of service.

III.5.1. Differences in probabilities of seeking care from particular providers for particular problems will be investigated through a series of $\chi^2$ analyses.

III.6.1. In previous studies we have developed a Need Sensitivity Index (NSI) defined as

$$\text{NSI} = \frac{\text{\% of persons in need of care who receive it}}{\text{\% of persons not needing care who receive it}}$$

To the extent that persons with complaints recognize whether or not professional attention would be appropriate and act accordingly, the numerator above will be large and the denominator low. The larger NSI, therefore, the more discriminating is the population in its use of services. With this in mind NSIs will be calculated and analyzed by cohort by ANOVA to determine the health education impact of various programs. We expect, for example, that NSIs for child care services will be higher in cohorts where such services were provided by Narangwal personnel.

III.7.1. Curves depicting utilization rates by distance from service facilities have been constructed and mathematically defined in many previous studies. We will establish such equations on a service-specific basis and test for significant differences. It may be that people are willing to travel further for certain services than for others or if multiple services are available in one place.

III.$\left\{\begin{matrix}8.1,\\8.2\end{matrix}\right\}$ Analysis to date has provided some information about unit and marginal service costs associated with defined service packages. Computer simulation studies utilizing this information will permit analysis of the cost and effect of a wider range of incremental service programs than we were able to incorporate into our field trials. The simulation studies will also permit us to pull out the "best" service components and synthesize them into one or more potentially more optimal packages for further field testing.

III.9.1. Cost analyses to date might suggest that certain services can be provided at minimum cost by a particular type of provider. Further simulation studies (see above) may indicate, however, that such services can be even better provided incrementally by another program, within resource constraints. After examining such possibilities through simulation, it may prove possible to develop an allocation or assignment model using operations research techniques.

III.10.1. Measurement and analysis of service contacts, while useful, give little insight into the content of these contacts and the associated quality and client satisfaction implications. Typical, i.e. average, activity composition of specific types of service contacts will be compiled, and then differences among workers, cohorts, and service types will be analyzed statistically by $\chi^2$ and multiple regression methods. Significant differences will finally be compared with selected measures of program effectiveness. It is possible, for example, that the work load in the comprehensive care program led to the truncation of certain types of services. We will seek to determine which services were affected and how. Further, the increased effectiveness of certain workers in promoting family planning utilization might be found to be associated with their activity patterns.

III.10.2. In the utilization surveys respondents reported services received from the Narangwal program and from other providers. Our own service records gave a count of services actually provided. From these two sources of data we will test for significant differences in recall rates by means of $\chi^2$. We will also compare the content and number of services provided in various cohorts with utilization of services both within and outside the Narangwal program.

III.10.3. Both the utilization study and the service records provided problem-oriented information which was coded according to the aforementioned "need" level, professionally determined. We are therefore able to conduct $\chi^2$ analyses to determine differences by selected population groups in the extent to which needs were met by our services.

IV.V.3.1. With the construction of probability transition matrices we can analyze through $\chi^2$ tests differences among methods in rates of discontinuation, change to the method and change to another method. To the extent found appropriate, we can also develop Markov models to predict ultimate utilization patterns and the manner in which specified interventions at appropriate times might alter the dynamic process.

IV.V.3.4. Our analysis of age-specific birth rates and age-parity-specific acceptance and practice rates, together with the probability transition matrices discussed above, will permit the development and testing of models of fertility reduction expected from alternative Narangwal and simulated programs.

IV.V.8.1. The extensive vital events data provided by the study can be readily converted to age-parity-specific birth rates. Then, following the model of Ravenholt, we expect to develop improved methods for the simple estimation of fertility changes when births are recorded by age and parity of mother but the total denominator population is unknown.

## VIII. IMPLICATIONS OF NARANGWAL EXPERIENCE FOR OTHER POLICY ORIENTED RESEARCH

A research project which involves as much effort and time as the Narangwal studies should be carefully evaluated for the benefit of other projects which are being set up. Many of the methodological lessons from Narangwal were learned intuitively, but even these will require careful thought and reporting to be valuable to other investigators. Some things can be quantified and will help define methodology for other studies. In this section we will identify some issues relating to methods and organization as examples of what can be reported as a result of further analysis.

A. The need must be recognized that any project should fit logically somewhere in a spectrum ranging from research to demonstration to implementation. Most research or demonstration projects have been conducted as entities in themselves with little direct relationship to eventual implementation. It is naive to think that if findings are made available they will automatically be used by adminstrators and policy makers. At Narangwal a great effort was made to include officials and educators in the planning and interpretation of research. Numerous manifestations of rapid feedback to implementation in the national program were evident and the reasons need to be analyzed. In fact it was sometimes embarrassing for us as research workers because findings were implemented before we felt they were clearly demonstrated.

B. Practical considerations need to be defined in decisions about the appropriate size of a population to be included in such a project. This seemingly mundane issue has great impact on the eventual usefulness of data. It also influences decisions about where on the research demonstration spectrum a project should fall. There are numerous trade-offs that must be made between providing services to whole population groups and measurement issues such as deciding on a sampling frame for data collection. The Narangwal experience has many lessons to offer both of a positive and negative nature.

C. A similar pragmatic question is how important is it to have a village project based in a village. A unique feature of the Narangwal Rural Health Research Center was that it was located in a village of only 1,800 people. We had over 165 staff members and their families living and working in our villages and learned a great deal about the problems and

the values of such arrangements. Overall, there is no question that it contributed greatly to the success of our project and to improving our understanding of the dynamics of village fertility and social action.

D. The place of academic institutions in international collaboration has been much discussed. The problems of trying to understand the relationships between fertility, health, nutrition and general development are so complex that they require the best possible concentration of international expertise. Such effort can be mobilized best through institutional linkages and the Narangwal experience taught us a great deal about such arrangements.

E. The need for continuity in long term prospective research seems obvious but requires justification. The Narangwal Rural Health Research Center ran effectively for approximately thirteen years and this population project was the major activity for the last five years of RHRC. Since understanding complex causal relationships will probably require long term prospective field studies, our experience provides many practical lessons about how such continuity can be maintained.

F. Logistics and local arrangements require much effort. Field research in the final analysis depends on such straightforward issues as whether the jeep wheels can be kept turning and whether supplies for both services and research can be maintained at appropriate levels. A practical sharing of experience about these issues should help others.

G. Flexibility in decisions and innovations was another practical feature of the work at Narangwal. A successful field project needs delegation of responsibility to the periphery in both technical matters and practical operational decisions. It seems desirable to have flexibility in decision making to take advantage of unexpected opportunities and insights that are an especially valuable advantage of field involvement as compared with theoretical research. Trying to set up such flexible field administrative arrangements has multiple hazards and we learned a great deal about some of these issues. These questions are particularly delicate in international collaboration.

H. Quality control of data and development of information systems is another complex subject. In order to keep the measurements valid and reliable for research purposes we tried many different methodological innovations in data gathering. Many of these lessons have direct value for the general development of information systems. It is

essential that there be wider recognition of the hazard of just taking research forms and adapting them to routine services as has been done all too often in the past. We conducted specific studies to provide for simplified streamlining of the data system. Equally important were our efforts to develop methods to maintain good quality control of data collection.

I. We need to know more about how to do research on the evolution of field services. One of the two main streams of research was to evolve rapid improvement in service packages by setting up prompt feedback mechanisms. We need to review the generalizability of experiences such as our feedback sessions once every two weeks where all field workers were brought together for intensive and frank discussions of their problems and successes. These were originally designed as training sessions for field workers but they served an equally important function in improving programs by permitting rapid identification of problems, getting maximum involvement of field workers in suggesting solutions and then trying them out. Other methods that we tried included a number of different approaches to rapid analysis of field data so that quantitative information could be analyzed on a continuing basis.

J. Methodological developments are particularly needed to improve understanding of the association between research and training. A major aspect of our field efforts was a continuing process of job analysis and redefinition which then contributed directly to retraining. We tried many different approaches to simplifying the training process and found several that seemed helpful. For instance, we found that the training period for family health workers could be reduced from 5 months to 6 weeks by alternating a week of academic training with a week in a preceptorship relationship with a field worker already on the job. This caused a phenomenal acceleration in learning. We need to review all of the experience on teaching programs and develop some generalizations. This applies also to our activities in developing standing orders and the writing of training and service manuals.

K. We feel that we have learned something about the political implications of this kind of field research. Although each situation will have its own widely different political environment some useful generalizations can be made from the experience in Narangwal. The fact that the project was terminated because of unfortunate policy misunderstandings between the U.S. and India perhaps has less relevance than some of the lessons that were learned about how to develop and maintain good relationships with leaders at the local level.

L. Underlying many aspects of this kind of work is the basic issue of learning how to make appropriate use of career rewards in promoting village service. A significant problem in staffing the field research was staff turn-over. A fair proportion of our staff got married but many of them continued to work, and this included the young women who served as family health workers. Much more of a problem was the reality that village service does not count for much in career development especially in academic professions. In spite of all the rhetoric promoting rural service, the reality is that for professionals a period of village work will in general be discounted in their career development. This is especially true if they expect to get on an academic or government service ladder. We need to gather all of the wisdom that we can on how to maximize the probabilities of getting the best persons to recognize the challenge and value to them of undertaking village work by making it an appropriate part of career development.

## VIII. FINANCIAL PLAN

### A. Personnel

The budget is primarily for partial salary payment to faculty members who will be doing the analyses proposed. Most of these faculty were involved in the field work and data collection so that there will be minimal problems of interpretation. It is important to keep this team together through this phase of analysis. The list of faculty to be provided part-time support is as follows:

Carl E. Taylor, M.D., Dr.P.H., Epidemiology, Health Services Research, Population Planning.
William A. Reinke, Ph.D., Statistics, Operations Research, Health and Population Planning
Jeanne S. Newman, Ph.D., Demography, Geography with interest in Migration Studies
R.S.S. Sarma, Ph.D., Demography, Statistician in charge of Data Gathering
Robert L. Parker, M.D., M.P.H., Epidemiology, Health Services Research
Prakash L. Grover, M.A., M.P.H., Ph.D., Sociology, Statistics, Population Planning
S. Sivaram, M.Sc., Computer Programming
Frederick A. Nass, A.B., Computer Programming

In addition, we welcome an arrangement whereby staff members of IBRD will be members of the team and work on the same basis as our own faculty in analysis and write-up of results.

B. Proposed Budget

| Personnel | % of effort | 1st Year | 2nd Year | Total |
|---|---|---|---|---|
| Carl E. Taylor | 3 | $ 1,000 | | |
| William A. Reinke | 3 | 1,000 | | |
| Jeanne S. Newman | 6 | 1,000 | | |
| Robert L. Parker | 7 | 2,000 | | |
| R.S.S. Sarma | 15 | 2,600 | | |
| Prakash Grover | 5 | 900 | | |
| Frederick A. Nass | 25 | 4,500 | | |
| Kalyandrug Sivaram | 25 | 3,000 | | |
| Secretary | 43 | 3,800 | | |
| | | 19,800 | 21,400 | 41,200 |
| Fringe Benefits (15% 1st year and 17% 2nd year) | | 3,000 | 3,600 | 6,600 |
| Total Salaries | | 22,800 | 25,000 | 47,800 |
| COMPUTER AND OTHER COSTS OF ANALYSIS | | 16,000 | 17,300 | 33,300 |
| SUPPLIES | | 1,000 | 1,100 | 2,100 |
| Total Direct Costs | | 39,800 | 43,400 | 83,200 |
| INDIRECT COST — 38% of Total Direct Costs | | 15,100 | 16,500 | 31,600 |
| TOTAL | | $ 54,900 | 59,900 | 114,800 |

Estimate for the 2nd year reflects an increase of approximately 8% to cover inflation and anticipated cost increases.

Revised 9/23/75

## REFERENCES

Berelson, Bernard 1966. "KAP Studies on Fertility," in Berelson et al, eds.: *Family Planning and Population Programs: A Review of World Development.* Chicago: University of Chicago Press.

Fisek, Nusret H. 1974. "An Integrated Health/Family Planning Program in Etimesgut District, Turkey." *Studies in Family Planning* 5(7):210-220.

Freedman, Ronald and Takeshita, J.Y. 1969. "The Continuing Fertility Decline in Taiwan: 1965." *Population Index* 33:3-11.

Population Council 1974. "India: The Singur Study." *Studies in Family Planning* 1:1-4.

Ridker, Ronald and Muscat, Robert 1973. "Incentives for Family Welfare and Fertility Reduction: an Illustration for Malaysia." *Studies in Family Planning* 4(1):1-10.

Sprehe, J. Timothy 1974. "The World Fertility Survey: An International Program of Fertility Research." *Studies in Family Planning* 5(2):35-41.

Wang, C.M. and Chen, S.Y. 1973. "Evaluation of the First Year of the Educational Savings Program in Taiwan." *Studies in Family Planning* 4(7):157-161.

WHO 1970. *Health Aspects of Family Planning: Report of a WHO Scientific Group.* WHO Technical Report Series No. 442. Geneva: World Health Organization.

WHO 1971. *Family Planning in Health Services: Report of a WHO Expert Committee.* WHO Technical Report Series No. 476. Geneva: World Health Organization.

Wyon, John and Gordon, John 1971. *The Khanna Study: Population Problems in the Rural Punjab.* Cambridge: Harvard University Press.

# PROPOSAL FOR ANALYSES OF THE NARANGWAL NUTRITION PROJECT

Department of International Health
The Johns Hopkins University
School of Hygiene and Public Health
Baltimore, Maryland
1975

# PROPOSAL FOR ANALYSIS OF THE NARANGWAL NUTRITION PROJECT DATA

## I. OBJECTIVES

A. To complete the data analysis and publication of results of a longitudinal study of interactions of malnutrition and infections in weaning age children in the Punjab, India. This analysis will help:

1. to develop and define the limits of methodology for the assessment of child health and nutrition status in rural communities of developing countries;

2. to contribute to understanding of causal interrelationships between nutritional status and childhood infectious diseases and the determinants of their synergism as it contributes to high child mortality and defective growth and development; and

3. to evaluate the impact of a low cost, auxiliary based health service delivery program on:

   a. the health status of a preschool child community,

   b. health and dietary attitudes and beliefs, and

   c. health service utilization in rural communities.

B. To synthesize generalizations and practical program implications relating to the ecology of rural child communities from a comprehensive analysis of the factors which determine child survival, growth and development and to develop a methodology for the planning and implementing of child and family health intervention programs specifically adapted to each local situation .

## II. CONCEPTUAL FRAMEWORK

A. The fact that current nutrition programs have not met the needs of mothers and children in absolute and relative poverty has led to an urgent need for careful evaluation of alternative approaches. Among the multiple approaches to improving nutrition there

has been a concentration on providing more and better food through improving agriculture; some focussing on economic issues such as price policy; considerable attention to the mechanics of mass food distribution in feeding programs; but very little attention to what actually goes on at the family level in child feeding and what the results have been in nutritional status. The interactions between family level nutritional care, maternal and child health services and family planning are particularly in need of clarification. Available data should be put into a form which can be used to guide policy and program decisions. Relative costs of various programs particularly need to be specified.

There is abundant evidence that a principal cause of high mortality, morbidity and deficient nutrition among the poor is synergism between malnutrition and common infections which are most serious during weaning. Alternative solutions are by no means clear; nutritionists recommend nutrition programs and public health people recommend infection control programs. The research at Narangwal showed that there is a program synergism in addition to a disease synergism. Both nutrition and infection control programs are needed to obtain real benefit. Analysis of the Narangwal data will permit a better understanding of what components of program can be expected to produce what effects, at what ages, with what sequence relationships, and most importantly at what cost.

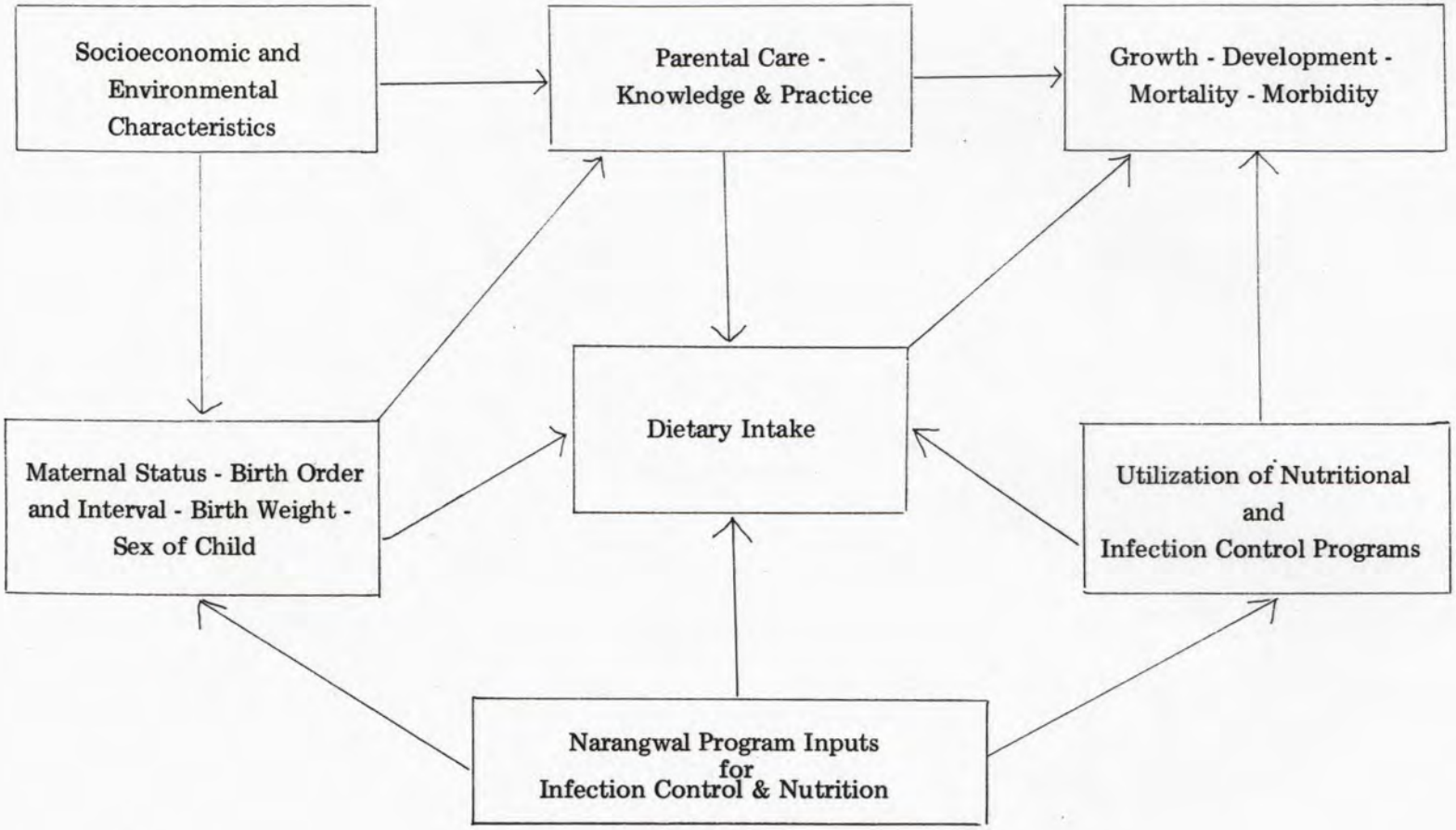
B. Formulation of Model

The model in Figure 1 summarizes the major groupings of interactions affecting growth, development, mortality and morbidity . The data from Narangwal field research can be used to help answer some of the questions associated with arrows between the boxes which represent groupings of variables. These are indicated by the illustrative policy questions that are implicit in the following statements:

1. Socioeconomic and environmental characteristics influencing child health are
   a. family wealth and income;
   b. occupation;
   c. caste;
   d. education; and
   e. family environment including housing, water supply, etc.

FIGURE 1

CONCEPTUAL FRAMEWORK FOR OVERALL ANALYSIS
IN NARANGWAL NUTRITION STUDY



2. The family's social and physical enviornment directly affects:
   a. maternal status - which is determined by prior nutrition and height, and these in turn have direct effects on birth weight, lactation and the child's initial start in growth
   b. birth order and interval, influenced by attitudes and practice of methods of family limitation and are major determinants of child health;
   c. birth we ight is influenced by maternal status and is a prime indicator of subsequent development
   d. sex of child in the Punjab, at least, is a major determinant of subsequent care.
3. Parental care is influenced by the family environment and parental knowledge and practice of:
   a. good hygienic and child rearing practices ;
   b. dietary knowledge of weaning foods; and
   c. quality of mother care and time she has available.
4. Dietary intake is influenced by:
   a. availability of food; and
   b. above factors.
5. Narangwal program inputs were applied in an experimental design which permitted partialling out the specific effects of:
   a. infection control measures - immunization and early diagnosis and treatment
   b. nutritional supplementation focussed on malnourished children as a result of weight surveillance;
   c. relative costs; and
   d. community participation.
6. Utilization of Nutritional and Infection Control Programs was determined by the interactions of the above variables.
7. Growth, development, mortality and morbidity of children was quantified with considerable specificity in relation to the influence of the above variables so that dynamic relationships can be traced.

## III. REVIEW OF OTHER RELEVANT FIELD INVESTIGATIONS

It has long been accepted as common knowledge that the poor in all countries of the world are shorter in stature and smaller in build than the rich, and they suffer more illnesses and have a significantly shorter life expectancy. In a now classic study in England in the 1930's the direct relationship between a low socioeconomic status and a number of parameters of

child health was firmly established (Stocks 1934). The effects of crowding, poverty, undernutrition and inadequate maternal care on growth, morbidity and mortality have been repeatedly confirmed in both developed and developing countries (Spence et al 1954; Schliessmann 1959; Underwood et al 1967; Cravioto et al 1967; Wittmann et al 1967; Scrimshaw 1968).

The perspective of concern was further crystallized when it was established that the effects of malnutrition and infection on child health were not only additive but synergistic (Scrimshaw et al 1959; 1968; Taylor and DeSweemer 1973). While the etiological relationships were clearly established it was not clear from a program point of view what the implications were. Those with professional interest in nutrition used this new evidence as evidence to support the claim that nutrition programs should be promoted because they would limit infections and the reverse was true of infectious disease specialists. It was not clear whether either program would control both conditions or whether both programs would be synergistic.

The first major field investigation compared the benefits of providing nutritional supplementation, infectious disease control and environmental sanitation as measured by their impact on child health was carried out in three villages in rural Guatemala under the auspices of INCAP. Major limitations in this study proved to be that they included only one village in each study group and they had no group of children who received both infection control and nutritional supplementation. Results from the INCAP study showed a clear decline in 1-4 year mortality in all villages but the effect was most marked in the village where nutritional supplements were given. Other results were essentially inconclusive (Guzman et al 1968).

Subsequently, a large number of nutrition and health intervention programs have been set up but few have had controls or any kind of experimental design to trace causal relationships. The urgent pressure led to mass programs, not because their effectiveness had been proven, but because the sheer plight of the world's poor seemed to demand some action.

Among the many programs established that were aimed at raising the nutritional status of preschool and school children were the Jamshedpur and Poshak projects in urban and rural India (Chaudhuri and Fenn 1973; CARE 1974), and Child Rehabilitation Village and the Lusaka Nutrition Project for the urban and rural malnourished of Zambia (Koppert 1972), a Young Child Nutrition Program in Rural Jamaica (Alderman et al 1973), as well as a large number of school feeding programs in almost every developing country. Some of these programs reportedly showed beneficial effects on some parameters of nutritional status.

For the most part, however, little more was included in their evaluation than enumeration of functional outputs on the assumption that providing food would automatically be good. None of these, to our knowledge, attempted to analyse or remedy underlying causes.

The other programs have focussed on efforts to improve child health through provision of low-cost preventive and curative health services. These include the Rural Health Project in Zonkwa, N. Nigeria; the Ankole Preschool Child Protection Program in rural Uganda; and others. As in the case of the food supplementation programs, little data are available to evaluate end-results, namely improvement of health status. More focussed efforts to quantitate results were included in the evaluation of Morley's Under Fives Clinic in Imesi Eli and the Nurse Practitioner Study in Gbaja, Lagos, Nigeria, which were carried out by doctoral students from this department (Cunningham 1971; Wellman 1971).

Recently more publicity has been given to efforts to improve child health through an integrated program of curative and preventive health services including health education, agricultural extension work and active community involvement. Best known are Dr. Behrhorst's project in the Guatemalan highlands (Behrhorst 1974); the Savar Project in Dacca District, Bangladesh; and the Drs. Aroles' Jamkhed Health Project in rural Maharashtra (CONTACT 1975). Over the last three years faculty members from this department have planned and implemented a comprehensive health care delivery program relying on multipurpose auxiliary health workers and a community nutrition program for a population of 120,000 at Companyganj in Noakali District, Bangladesh. Statistical information is not yet available for any of these projects and their impact on child and family health cannot be evaluated. We are aware of only one other investigation, where the interrelationships between social, demographic and economic variables and child health has been intensively studied and a successful intervention program instituted. This long term research is being carried out in the barriadas of Lima by Dr. George Graham of this department (Graham 1972; Baertl et al 1970).

## IV. METHODOLOGY

### A. Background of the Narangwal Nutrition Project

This field project evolved as a prospective study of the interactions of malnutrition and infectious diseases and their combined effects on preschool child development and mortality

patterns. Groups of villages were provided different health service inputs and the effects of these services on growth (weight, height, head circumference), infectious disease (prevalence, incidence, duration, and mortality) were measured through longitudinal and cross sectional surveys. Ten villages participated in the study. Four groups of two to three villages each received the following service packages: (1) nutritional supplementation, (2) infectious disease control, (3) a combination of these two, and (4) control - no services other than emergency care of acute illnesses. All services and most of the data collection were carried out by auxiliary personnel (lady health visitors) who lived and worked in each village. The project spanned 6½ years. The first two years were spent in setting up the service delivery programs, selection of villages, elaboration and pretesting of the research data collection process, staff selection and training. The bulk of the data was collected from 1969 until mid 1973. Most of the data has, in the meantime, been edited and is available for direct analysis or linkage with other data sets which were obtained in a parallel research project conducted at the same time — the Narangwal Population Project. In this study different combinations of health and family planning services were integrated and the effect on family planning utilization was monitored. Five groups of four villages were included; the services offered were: (1) family planning and women's services; (2) family planning and child care and nutrition; (3) family planning with both women's and child care; (4) family planning education; and (5) control.

With funds from AID, NIH and WHO, preliminary results of the Nutrition Study have been analyzed. Significant effects on growth and mortality have been demonstrated. Certain of the etiological determinants of child morbidity and mortality seem to be emerging as important and some interaction patterns have been verified. The results looked at thus far are mainly within specific data sets and much work still remains to be done in relating data sets to each other.

B. Data Sources

1. Longitudinal Surveys (all children in ten villages)

Anthropometry: weight, height, head circumference at monthly intervals up to nine months, bimonthly up to 21 months, and trimonthly intervals up to the 36th month.

Morbidity: weekly morbidity survey by recall supplemented by physical examination on the day of visit.

Vital Statistics: monthly births, deaths

Fertility Survey: at bimonthly intervals on all eligible women

Feeding Center Attendance: (since 1971 in nutritional supplemented villages only)

Dietary Survey: for weaning age and weaning pattern at trimonthly intervals (originally only in nutrition supplemented villages)

2. Cross-sectional Surveys (all 26 villages in both nutrition and population projects)

Census: 1967/68, 1971/72, 1973

Socioeconomic survey: 1967/68, 1971, 1972

Work sampling of activities of all service personnel: 1971

Health care utilization: 1973

Pregnancy History: 1969, 1971/72

Anthropometric cross sectional surveys: 1970, 1971, 1972 (only nutrition villages)

3. Cross-sectional Surveys on Sample Populations

Dietary Survey (3 day and 1 day - observation technique): 150 children

Psychomotor Development Tests: 500 children

Preschool intelligence Tests: 54 children

Knowledge of child nutrition (food concepts): 150 mothers

Knowledge of childhood illness patterns and management (death concepts): 150 mothers

Malnutrition and immune response post immunization: 270 children

Quality of mother care survey: 150 families

Stool parasite survey: 150 children

Biochemical indices of nutritional status: 1970, 1971, 1973

C. Overall Plans for Analysis

A large amount of information was accumulated on numerous aspects of community life from a defined population of children and this offers a considerable resource for more complete analyses than has been possible within the time and funding that has been available heretofore. When the Nutrition and Population Projects were planned, data collection was specifically designed in a format to permit multiple ancillary analyses of great intrinsic importance. The effort and investment in prospective field research is so great that the maximum scientific use ought to be made of these data that have been so laboriously gathered. We propose to use available information from this and the parallel population study to arrive at a more comprehensive understanding of the dynamics of change in health and nutritional status and development in general in rural communities. We are specifically interested in:

1. learning more about the interrelationships between health, socioeconomic status, education, demographic status and: (a) utilization of service programs [nutrition, health, family planning], (b) changes in knowledge, attitudes, and beliefs of child growth and development, and family planning;

2. assessing the effects of economic development together with a low cost health service program on parameters of health and nutritional status; and

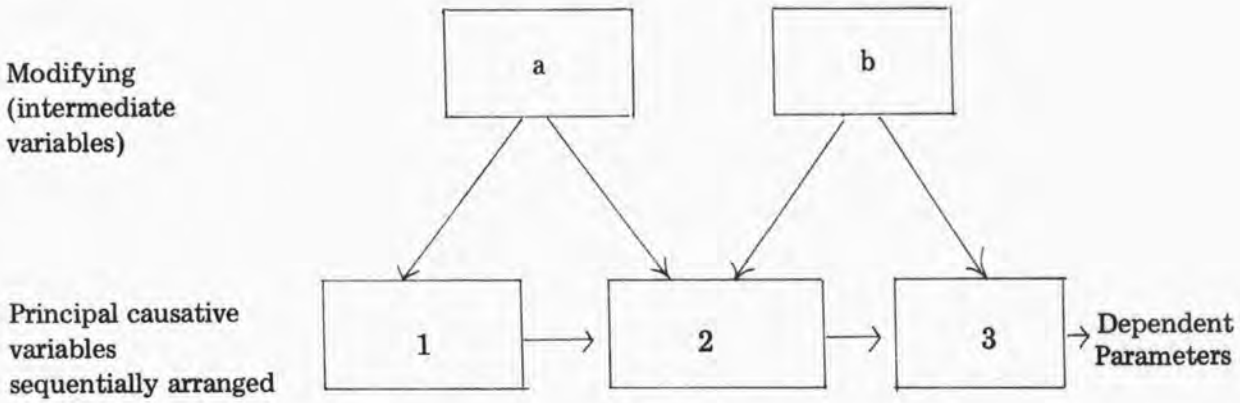
3. arriving at cost/benefit/effectiveness estimates for various components of rural health and nutrition services for use by national health planners. From these results policy implications will be derived and practical program alternatives developed.

D. Statistical Analysis of Causal Relationships and Impact of Specific Intervention Activities

As a first stage in bringing various data sets together it is proposed that groups of variables (social, dietary, demographic, morbidity, anthropometric, economic) will be assessed for the strength of correlation they show with parameters of child and family health by means of simple correlation and regression analyses. This will clarify associations between variables.

Then, in order to begin to define causality the next step will be to examine those variables that seem important for the strength of their sequential causal relationships with the other parameters in the life experience of children. A model of the possible relationship will incorporate both etiological and modifying variables in logical arrangements for testing according to differing ordering of the sequences. (Figure 2)

Figure 2




By determining the strength of each of the sequential arrangements of variables as they relate to dependent variables, some idea of causation can be developed. Then by analyzing what happened when specific variables were changed as part of a specific intervention it may be possible to select those with greatest promise as cost-effective control measures. These can then be incorporated into a larger intervention plan for program implementation.

## V. DETAILED STATEMENT OF PROPOSED ANALYSIS

The field work on the nutrition project terminated in 1973. Financial support from AID continued until June 1975. This has permitted a considerable amount of analysis to be completed. All of the field information was coded and transferred to computer tapes and IBM cards. It has been cleaned and edited. Preliminary analyses included all marginal and descriptive information. Data relating specifically to the original hypotheses have been processed. This is, however, only the beginning of what should be done. Some of the most important issues are to place these findings in the broader context of relationships to some of the other things that were going on in these village communities and families. There are many cross tabulations and more refined statistical analyses to be done to define explanatory variables and their relative strength.

Most challenging will be the process of extrapolating these findings to their practical program implications.

In the sections that follow there are two columns presented. On the left we have listed the statistical analyses that have already been done. On the right are listed those that remain to be done before more general interrelationships and their degree of association can be established. *In the appendices we have included the tables and figures that have so far been elaborated.*

| Done | To Be Done |
|---|---|
| A. GROWTH AND DEVELOPMENT | |
| 1. Dynamic growth process (weight and height gain) by cohort, caste, sex, age, season, number and sex of siblings, maternal age<br>*(See Appendix A)* | 1. Weight, height, head circumference gain by socioeconomic, cultural, educational, and occupational variables; and birth order<br>Statistical Analysis<br>— linkage of present anthropometric tape with socioeconomic survey<br>— stepwise multiple regression to determine the predictive strength of individual variables<br>— development of model for determination of "child at risk" |
| 2. Effect of differential service programs on malnutrition prevalence<br>— proportion of malnourished children by caste, sex, cohort, age<br>— their recovery rate<br>— the duration of the malnourished state<br>*(See Appendix B)* | 2. Patterns of Nutritional Status<br>Distribution of child population by levels of nutrition according to demographic, sociocultural, economic, birth weight, birth order, etc. variables. This will provide profiles of nutritional status in terms of these parameters.<br>Statistical Analysis<br>— linkage of anthropometric, pregnancy history, socioeconomic surveys<br>— frequency distribution of population in cross-tabulation of multiple variables.<br>— analysis of variance and covariance |
| 3. Feeding center utilization (by malnourished children only) by caste, sex, age, season and year (2½ years)<br>*(In form of computer print-outs)* | 3. Recovery rate and duration in malnourished state by sociocultural, economic, demographic etc. variables<br>— relapse rate by these variables |

| Done | To Be Done |
|---|---|
| | 4. Feeding center utilization of malnourished children by the extended number of variables mentioned above. Characterization of non-users.<br>Statistical Analysis<br>— data linkage<br>— stepwise multiple regression and/or analysis of variance and covariance<br>— determination of "profile" of child and family "at risk" in terms of response to care program<br>— model for assessment of risk factors in relation to care |
| B. MORTALITY | |
| 1. Descriptive patterns of child mortality<br>— mortality rates by caste, sex, age, season, nutritional status, birth order, cohort affiliation and by calendar year<br>— (subsample) cases of mortality by age, sex, caste, season, nutritional status, birth order<br>*(See Appendix C)* | 1. Mortality rates by previous child mortality history in family as well as sociocultural, economic variables<br>Analysis<br>— search of mortality-cluster families (and their characterization by cohort<br>— linkage of vital statistics - pregnancy history, socioeconomic, cultural, anthropometry, morbidity, survey data<br>— $x^2$ statistics<br>— analysis of variance and covariance of cross tabulations |
| 2. Death concept survey<br>Survey of 150 mothers in project study village and unrelated neighboring communities to assess their knowledge as to the principal threats to child health, signs and symptoms of serious illness, preventability of childhood illnesses<br>*(In form of computer print-outs)* | 2. Evaluation of impact of different service program mixes on child mortality by age<br>Statistical Analysis<br>Mortality rates for perinatal, neonatal, post neonatal, 1-1.9 year, 2-2.9 year and 3 year + age groups in different cohorts |
| q | 3. Evaluation of maternal knowledge of health hazards, etiology and appropriateness of home-treatment methods, by sociocultural, economic, educational and demographic variables<br>Statistical Analysis<br>— development of a knowledge scale<br>— stepwise multiple regression of total variables on obtained score to determine the variables of highest predictive power |

| Done | To Be Done |
|---|---|
| C. MORBIDITY *(In form of computer print-outs)* | |
| 1. Program effects on child morbidity prevalence by symptoms or symptom complexes, age, sex, caste and cohort<br>— morbidity prevalence by season, socioeconomic, demographic variables<br>In addition to above:<br>— duration, incidence of selected symptoms or symptom complexes by social, economic, demographic variables | 1. Morbidity-anthropometry links<br>Effects of past growth on morbidity and the reverse effects of past morbidity on future growth by caste, sex, cohort and social economic demographic variables<br>Statistical Analysis<br>— link of anthropometric, morbidity, socioeconomic, pregnancy history data<br>— multiple regressions with growth/morbidity as dependent variables, morbidity/growth, caste, sex, cohort, socioeconomic status as independent or intermediate variables |
| 2. Preliminary assessment of program effect by cohort, uncorrected for duration of observations, number of home visits per unit time in different cohorts. | |
| D. SERVICE RECORD ANALYSIS *(In form of computer print-outs)* | |
| 1. Work sampling<br>Daily work load of auxiliary worker, supervisor, and physician according to research and service categories and more specifically by curative, preventive service activities by cohort and season | 1. Quality of clinic services providing treatment and/or advice given in the course of the daily village clinic by symptom complexes especially for:<br>diarrhea<br>dehydration<br>fever<br>anemia<br>sore eyes<br>otitis media<br>pneumonia<br>by cohort. |
| 2. Cost of service delivery<br>Program by type of service, worker, cohort | 2. Service utilization<br>Number of clinic visits (per unit number of children) by age group, sex, caste, cohort, 3 month periods (season), and over the 2½ years.<br>Cross tabulation of service utilization and cost of socioeconomic, demographic variables, parental education, caste, sex, birth order, anthropometric, morbidity and mortality experience |
| 3. Cost benefit analysis<br>Cost per death averted | |

(continued)

| Done | To Be Done |
|---|---|
| | Statistical Analysis<br>— simple $x^2$ or "t" statistics<br>— stepwise multiple regression with service utilization (or cost) as dependent variables, and the total number of variables (as outlined above) as independent or intermediate variables. |

## ANCILLARY STUDIES ANALYSIS

### A. CHILD DEVELOPMENT

1. Psychomotor development of rural Punjab children. Assessment of psychomotor development of more than 500 preschool children according to early and concurrent nutritional status, age, caste, sex, social, socioeconomic indices, demographic characteristics, parental education and occupation.

2. Verbal and performance skills in the development of rural Punjabi children through use of the WSSPI (Wechster-Infant) standard test modified and adapted for rural Punjab. Verbal and performance skills were assessed in 54 three to five year old Punjabii children and correlated with past and current nutritional status

*(See Appendix D)*

### Growth, Morbidity, Mortality

1. Effect of a new birth, on the health pattern (growth, morbidity, mortality) of the next older sibling and in relation to other siblings.
   Statistical Analysis
   - examination and comparison of "before" and "after" growth and morbidity patterns of older siblings
   - multiple regression with growth (weight gain) and morbidity of the next in line sibling as dependent variables, caste, sex, sex of newborn, birth order, parental education and economic status, number and sex of older live siblings as intermediate or independent variables
2. The effect of prematurity or low birth weight or subsequent growth (weight and height) morbidity and mortality (retrospective study)
3. Determination of factors predictive of prematurity and low birth weight for rural Punjab
   Statistical Analysis
   - link of anthropometry, pregnancy history, socioeconomic survey data
   - stepwise discriminant analysis of above two groups for predictive strength of demographic, social, socioeconomic variables.

| Done | To Be Done |
|---|---|
| Verbal and performance skills in the development of rural Punjabi children through use of the WSSPI (Wechster-Infant) standard test modified and adapted for rural Punjab. Verbal and performance skills were assessed in 54 three to five year old Punjabi children and correlated with past and current nutritional status | 4. Further correlations through stepwise multiple regression of verbal and performance skills as related to social, socioeconomic, parental education and occupation, and demographic parameters (independent variables) |
| B. CHILD CARE | |
| 1. Weaning<br>Age at weaning, weaning pattern (type of food) by caste, sex, cohort.<br>Evaluation of a pilot project on: levels of maternal care (protective, stimulative, nutritive, in groups of children of different caste, sex, age and nutritional status.<br>*(Computer print-outs)* | 1. Dietary patterns of Punjabi rural preschool children<br>— analysis of diet surveys (direct observation technique) data on 2[illegible] preschool children as to feeding pattern (type of food), quantity and quality (nutritive content) by age, sex, caste, cohort, education, socioeconomic status<br>Statistical Analysis<br>Analysis of variance |
| C. BELIEFS AND TRADITIONS | |
| 1. Death Concept<br>As described under mortality | 1. Food Concept Study<br>Survey of 150 mothers in nutrition supplemented, non-supplemented and project unrelated villages as to their knowledge of child nutrition in health and disease by maternal age, socioeconomic status, educational level, family size, age and sex of youngest child<br>Statistical Analysis<br>$x^2$ tests<br>— development of a scoring system to determine general levels of maternal knowledge of child nutrition<br>(continued) |

| Done | To Be Done |
|---|---|
| | — multiple regressions analysis with knowledge score as dependent variables and social, socioeconomic, educational, and demographic variables as independent or intermediate variables |
| D. ETIOLOGY OF MALNUTRITION, HIGH MORBIDITY RATE AND CHILD MORTALITY | |
| 1. Comparative study of groups of randomly selected malnourished and well nourished children (25 severely malnourished and 25 well nourished children) caste, sex, and demographic composition, their parent's occupation, income, maternal quality of care, their dietary pattern and past morbidity experience. *(See Appendix E)* | |
| 2. Immune response in malnutrition<br>Assessment of cell mediated and humoral immune response mechanisms in malnourished and well nourished children *(See Appendix F)* | |
| 3. Effects of short term morbidity on growth<br>Assessment of vaccination on short term weight change by nutritional status, age, season, and cohort *(See Appendix G)* | |
| 4. Stool parasitology<br>Stool parasitology prevalence in malnourished and well nourished children by age and sex. | 1. Stool parasitology by caste, socioeconomic, status, diarrheal disease prevalence<br>Statistical Analysis<br>— linkage of socioeconomic and morbidity surveys with stool parasitology<br>— analysis using $x^2$ or "t" statistics |
| E. COMMUNITY ORGANIZATION | |
| 1. The effect of a community supported day care center on the health status of participating children during the harvest season<br>*(Paper in draft form)* | 1. Evaluation of actual and potential community participation (food donation, day care center maintenance, clinic construction and community health surveillance) |

## VI. PROPOSED CHRONOLOGICAL WORKPLAN

| | |
|---|---|
| Completion of basic nutrition data analysis | 6 months |
| Development of methodology for problem assessment and intervention program planning: | 3 months |
| Preparation of Book and journal articles on specific topics | 3 months |

## VII. IMPLICATIONS OF THE EXPERIENCE GAINED IN NARANGWAL FOR THE WORLD BANK

When the Narangwal Rural Health Research Center activities were terminated for political reasons in 1974 we had worked in Narangwal for thirteen years. The first research project was a five year investigation of the motivational factors influencing the attitudes of Indian medical graduates to rural service. Other studies were added to get a better understanding of factors affecting the health status of the rural communities we were living in. Separate field projects studied attitudes and beliefs relating to health and disease, indigenous practitioners, family planning, nutrition, health care accessibility and utilization and influence of demographic and social characteristics on health service. To our knowledge, no other rural area has been looked at from such an holistic approach. Eventually the field work included a population of over 30,000 in 26 villages. Our functional analysis methodology was adapted for ongoing program evaluation which will permit continuous monitoring of program progress, efficiency and cost. We have explored various potentials for community participation in our preventive health care programs and found them to be promising. Our long stay in one area, combined with background information from the Khanna Study which was done ten years earlier only 35 km away, make it possible for us to assess some effects of the rapidly improving economic conditions in the Punjab on nutritional status, health. These can be compared with the impact of the specific service packages introduced as experimental inputs. Because of our long standing and broad ranging research involvement, we feel we are qualified to suggest realistic intervention programs.

Findings from these analyses can be fed directly into policy definitions. In the allocation

of national and international resources many questions are being asked that require cost/benefit judgements. Too often the data that are available from surveys or reported statistics are focussed on particular parts of the complex interactions between health, population and development. The information available for analysis here is unique in its coverage of sectors, in its being longitudinal and prospective and in having both cost and benefit components. By asking specific questions on particular interactions these data can provide answers within the br der matrix of other interactions. Once these data are in shape for specific analyses they can also be used by other research workers for additional analyses.

## VIII. FINANCIAL PLAN

### A. Personnel

The main cost will be for partial salary payments to faculty members who will be involved in the analysis. Most of the faculty were actively involved in the actual project activities, and data collection in the field and have been responsible for the analysis since the close of the field work. The faculty to be supported are as follows:

Carl E. Taylor, M.D., Dr.P.H., Epidemiology and Health Services Research

Arnfried Kielmann, M.D., M.P.H., Epidemiology, Health Services Research, responsible for overall analysis and write-up

Frederic A. Nass, A.B., Computer Programmer

Nandita Kielmann, M.Sc., M.P.H., Assistant Nutritionist

Robert L. Parker, M.D., M.P.H., Epidemiology, Health Service Research and work sampling analysis and interpretation

William A. Reinke, Ph.D., Statistician

In addition, we welcome an arrangement whereby staff members of IBRD will be members of the team and work on the same basis as our own faculty in analysis and write-up of results.

B. Proposed Budget

| Personnel | Percent of Effort | Total for one year |
|---|---|---|
| Carl E. Taylor | 5 | $ 2,000 |
| Arnfried Kielmann | 74 | 12,500 |
| William A. Reinke | 5 | 2,000 |
| Frederick Nass | 25 | 4,500 |
| Nandita Kielmann | 46 | 7,800 |
| Robert L. Parker | 5 | 1,200 |
| Secretary | 40 | 3,500 |
| | | 33,500 |
| Fringe Benefits (15%) | | 5,050 |
| | | 38,550 |
| COMPUTER AND OTHER COSTS OF ANALYSIS | | 7,000 |
| SUPPLIES | | 500 |
| Total Direct Costs | | 46,050 |
| INDIRECT COSTS — 38% of Total Direct Costs | | 17,500 |
| TOTAL | | $ 63,550 |

Revised 9;23;75

## REFERENCES


1. Alderman, et al. 1973. "A young child nutrition program in rural Jamaica." *Lancet* 1:1166

2. Baertl, et al. 1970. "Diet supplementation for entire communities, growth and mortality of infants and children." *Am. J. Clin. Nutr.* 23:707.

3. Behrhorst 1973. *Contact 19*, February.

4. *CARE* 1974 (Posak) Report of Workshop. India.

5. Chaudhuri and Fenn 1973. "Appraisal of pre-school child feeding programme." Proceeding of the Sixth Annual Meeting, Nutrition Society of India, March 1973. (Hyderabad, India: National Inst. of Nutr.)

6. *Contact 25*, 1975. Comprehensive Rural Health Project, India.

7. Cravioto et al. 1967. "The ecology of infant weight gain in a pre-industrial society." *Acta Ped. Scand.* 56:71.

8. Cunningham, as cited in Taylor, 1971. *Nutrition and Population*, revised paper presented at the International Conference on Nutrition, National Development and Planning, M.I.T. October, 1971.

9. Graham 1972. "Environmental factors affecting the growth of children." *Amer. J. Clin. Nutr.* 25:1184.

10. Guzman, et al. 1968. "Nutrition and infection field study in Guatemalan villages, 1959-1964 (VII)." *Arch. Env. Hlth. (Chicago)* 17:107.

11. Koppert 1972. The Nutrition Rehabilitation Village, Zambia. (National Food and Agriculture Department, Lusaka, Zambia.)

12. Schliessmann 1959. "Diarrheal disease and the environment." *Bulletin of WHO* 21:381.

13. Scrimshaw 1968. "Death rate of one year old children in underveloped countries." *Arch. Env. Hlth. (Chicago)* 17:691.

14. Scrimshaw, et al 1959. "Interaction of nutrition and infection." *Am. J. Med. Sc.* 237-367.

15. Scrimshaw, Taylor and Gordon 1968. *Interactions of Nutrition and Infection, WHO Monograph Series No. 57.* (WHO: Geneva).

REFERENCES - continued

16. Spence, et al 1954. *A Thousand Families in Newcastle Upon Tyne.* London: Oxford Press.

17. Stocks 1934. *Proc. Roy. Soc. Med.* 27:1127.

18. Taylor and DeSweemer, 1972. "Nutrition and Infection," in *Food, Nutrition and Health: World Review of Nutrition and Dietetics, vol. 16, ed. by Rechcigl.* (Basil: Karger)

19. Underwood , et al 1967. "Height, weight and skinfold thickness - data collected during a survey of rural and urban population of West Pakistan." *Am. J.Clin.Nutr.* 20:694.

20. Wellman 1971. *Gbaja Family Health Nurse Project Family Planning Impact,* doctoral thesis, Johns Hopkins University.

21. Wittmann et al 1967. "An evaluation of the relationship between nutritional status and infection by means of a field study." *So. Afr. J. Med. 41.*

Research gen

INTERNATIONAL PROGRAM OF LABORATORIES FOR POPULATION STATISTICS
an activity of the Department of Biostatistics and the Carolina Population Center at the University of North Carolina at Chapel Hill

29 September 1975

Dr. Mats Hultin
International Bank for Reconstruction and Development
1818 H Street N.W.
Washington, D.C. 20433

Dear Dr. Hultin:

Dr. John Winterbottom of Educational Testing Service suggested I write you concerning an interest I have in evaluating the expansion of education systems in developing countries. A French demographer-colleague of mine, Marie Daniele Fichet, and I (an economist-demographer) are interested in doing a quantitative study of changes in enrollment rates and in selected qualitative indicators of education in developing countries over the period 1950-1970. Our purpose is to investigate the extent to which demographic and economic factors have influenced the expansion of education in developing countries using multivariate statistical techniques. We have collected some of the necessary education, demographic, and economic data from various UN publications. We believe that the data adjustments we have made and are continuing to carry out will be sufficient to permit useful quantitative analysis that should have implications for government policies in education and related eocnomic and population areas. The focus will be on various indicators of education as dependent variables.

The purpose of this letter is to inquire whether your organization would be interested in funding such a research project. The work would be carried out in the United States here at UNC by the two of us and a research assistant. While we have not yet prepared a detailed proposal or budget, the amount of funding we would be seeking is modest, probably in the 25,000 to 35,000 dollar range.

We would be most appreciative of any information you can give us.

Sincerely,

R E Bilsborrow

Richard E. Bilsborrow
Economist

REB/kw

Population Laboratories
School of Public Health
University of North Carolina
Chapel Hill, N.C. 27514, U.S.A.

Telephone: (919) 966-1131
Cable Address: POPLABS

Research
Gen.

Mr. Norman Hicks, EPDCA September 25, 1975

B. B. King, VPD Signed B. B. King

Working Paper on SIMLINK

1. I have read the first 21 pages of this draft and glanced at most of the rest. It is in need of intensive editorial care. My comments are too numerous to put down on paper. They can best be discussed by going over the draft with a marked up copy. The following general comments, with a few examples, will give you the flavor.

2. First, cosmetics. There is at least one typo per page (three in the penultimate paragraph on page 3) and a garbled footnote on page 4. Subscripts run into the line below. There is a diffidence about saying what units are being used (Tables 5, 6 and 7); the commodity models, except for coffee are innocent of any units. Some symbols of statistical tests like "t" and "DW" (or sometimes "DWS") are not identified. Different terms of art are used for the same thing (e.g. nominal and current prices). There are some rather gratuitous phrases or sentences such as the one about sellers not having perfect vision (page 9) and an overconfident prediction (as opposed to assumption) on a sensitive subject (OPEC price policy) on page 19.

3. A few miscellaneous examples:

(i) Tables 1 and 2 on pages 4 and 5. Page references could be given at appropriate places on page 3.

(ii) The symbol for number (#) in Table 2 isn't universal. Why not say "number" or "No."?

(iii) On page 11, the "supply and demand estimates". Aren't they supply and demand growth rate estimates?

(iv) On page 13, "see Section C, below". Where? It starts on page 6.

(v) Appendix II. There is a certain amount of non-definition here. For example, fats and oils: is QXSOY the same as XSOY etc. If not, what? Is the last beef equation meant to be RPB?

(vi) In the coffee model, is a weighted average of five years a three-year average? Because the weights add to a total (arbitrary) of three? (See also typo in one subscript).

4. You may think these are "only" tiresome cosmetics, but they add up. If we are going to put Working Papers into the Bank Catalog and give them wide circulation, I am convinced that, while a slip here and there is nothing to weep over, there has got to be some minimum standard.

5. My second group of comments would come under the heading of the "keep the reader guessing" syndrome. It has to be assumed that the audience is unfamiliar with SIMLINK. They need guidance on things which may appear obvious to you and every effort should be made to avoid confusing them. A lot could be done.

6. First of all, the reader has a right to know what to expect. You could start on the first line of the cover page. In fact, "this paper describes the structure of the SIMLINK model" and an application of it with particular assumptions. It is not about the assumptions of the model - unfortunately; that would be an interesting subject, but it is not discussed, at least not much. In Item 5 on page 3, you mention one of the ways in which the model may be solved. On page 15 it turns out there are two. I suspect, on the basis of an example or two, that there is room for judicious use of subheadings and introductory sentences.

7. Perhaps the trickiest thing for the reader to follow is the treatment of prices. As I understand it, the model is based on constant international prices (in some sense). On these are superimposed fluctuations in specific commodity or commodity group prices. These specific prices are known as "real commodity prices"1/. To the extent that a particular level of inflation is assumed, it applies to international prices in general and to these real commodity prices. At what stage an assumed rate of inflation is introduced is not yet clear to me. There is room for confusion. Let me give you some examples.

8. Section 4 on page 12 is called "Prices and inflation". It is not about that at all. It is about import price indices and how they are constructed. One would assume that they are real commodity price indices, since there is no specific statement to the contrary. But then one gets to worrying about this, because the price index for capital goods, for example, is said to be based on "international inflation rates" and therefore clearly isn't. I don't understand the last one on intermediate products at all.

---

1/ Most, but not all, independent of the rate of inflation.

9. Further down page 13 one comes to something called "constant dollar exports" (X). This undefined phrase would appear, when I try to work it out, to be an export volume based on prices of exports in the base year. This, obviously, has to be then adjusted back in order to arrive at exports in real commodity prices (XPI) in the current year. You then adjust again to arrive at exports in terms of their purchasing power for imports (XADJ). This is really quite confusing and seems to me to include some unnecessary steps. I cannot see why you cannot have a simple equation in which the sum of export volumes times price (real commodity) plus capital inflow equals the same sum for imports without going through all these gyrations.

10. However, that brings us to another problem, namely, the capital inflow (RG). If one combines Equations 8 and 9, which gives the simple formulation above, then it appears that capital inflow is not capital inflow at constant international prices but is divided by the price index of import prices. This means you have to multiply it back again. Maybe there is a rationale for this, but I don't see it. In any case, one shouldn't have to find it out. The reader needn't be coddled, but he isn't doing a double acrostic. The section in the last half of page 13 incidentally, is really about regional balance of payments and might be so headed. The subheading "Regional Growth Models" might well come at the bottom of the page.

11. On page 15 we come back to capital inflow again. On page 13 this is clearly stated to be an exogenous estimate. Two pages later, its definition is changed. In Equation 21 the new (RG) equals the old one plus "additional capital requirements". Why not have a separate symbol for the latter?1/ I don't think this is trivial. The first (RG) is associated with the definition of (M). The latter, which is called import supply, which is a bit of a misnomer, is really the estimated resources available for imports based on the original exogenous estimate of capital inflow. Once one has worked this all out, I don't think it is too difficult2/ The presentation just doesn't help at all.

12. I have asked Rachel Weaving to take the paper in hand. After she has read it, perhaps we can talk about it.

---

1/ For example ACR. Then ACR + M = $M_d$. You either fix GDP growth rate and solve for ACR or put ACR = 0 and solve for GDP.

2/ Except that the final word on RG only comes on page 20 and it is a rather ambiguous one. One learns here that RG is not independent of the rate of inflation - for the first time.

cc: Messrs. Chenery, Tims
Miss Weaving

BBKing:gm

Research gen

Mr. Ravi Gulhati

September 25, 1975

Michael L. Hoffman

Income Distribution

1. I would like to expand briefly on my sotto voce comment to you as I left the Griffin Seminar.

2. None of the prescriptions of Griffin, or others that I have seen, deal with what I believe to be the fact that in most of the very poor countries and many of the smaller not so poor countries, a very large proportion of persons in the upper 5 to 10% income groups are persons employed by central regional and local governments and public agencies. Furthermore, I suspect that a substantial part of the measurable increase in income inequalities, in the countries where this has occurred, has been due to the growth in the size of the public sector rather than anything to do with asset distribution. So far as distribution within indigenous populations are concerned, one should add the effect of substituting nationals at "european" salaries for expatriates. Finally, I suspect that a lot of China's "even" distribution is due to the fact that civil servants don't get ten to twenty times what a peasant gets.

3. It ought to be possible to test my hypothesis in at least a few countries in different regions. If this has been done or could be done, I would be very much interested in knowing the results.

MLHoffman:pd. MLH

Research gen

September 25, 1975

Mr. Robert L. Schiffer
Executive Assistant to the Rector
United Nations University
Toho Seimei Building, 29th Floor
15-2, 2-chome Shibuya
Shibuya-ku
Tokyo 150, Japan

Dear Mr. Schiffer:

Mr. C.V. Narasimhan, in his letter of September 16, 1975 to Mr. McNamara, has asked that we send you an account of the World Bank's research capabilities and plans.

The Bank has an expanding research program. The Bank's research program deals with general issues of development policy as well as specific sectoral problems of particular concern to the Bank's operations in the developing countries. I am pleased to enclose a copy of an abstract of current studies of the Bank program. It includes an overview of the program, involving a number of departments, and a brief description of projects in progress. In addition, to the research being carried out on a Bank-wide basis, and in the interest of expanding the program, a Development Research Center was established in 1971 to provide a focal point to broaden the scope and to improve the technical quality of the Bank's research. The Center's work is an integral part of the overall research program of the Bank, but it is particularly responsible for the evaluation and development of techniques for economy-wide analysis. I am enclosing a booklet which briefly describes the activities of the Center.

I hope this information will be useful to you. We will send you up-dated information on the Bank's research program as it becomes available.

Sincerely yours,

Encls.

Mahmud Burney
Deputy Special Representative for
United Nations Organizations

Copy to:
Mr. C.V. Narasimhan
Under-Secretary-General for
Inter-Agency Affairs and Coordination
United Nations, N.Y. 10017

MB
Files with incoming letter
MBurney:mmcd

Research

Mr. John Simmons September 19, 1975

G. Pfeffermann

Issues on Self-Management : Research Proposal

1. You asked for my reactions to your draft research proposal. I have two. First, the means and the ends don't seem to match. Your end - a study of the nature you propose - would in my opinion take a great deal more time and money than what you put forward. As you know, I think the subject is of considerable interest, and therefore deserves proper treatment. I do not think that you can hope to do any serious work with six professional and 3 non-professional man-months. That is more likely to be the time required to set out a conceptual framework and terms of reference. Two, your proposal involves a trip to Peru in January 1976. This is subject to clearance by the Programs Department, should the Research Committee approve your proposal.

2. Finally, my understanding was not that "An important part of the work will be done by consultants who are nationals of the particular country". The sense of the Task Force meeting as I understood it was to "cross fertilize" and bring to bear, say, Peruvian experience on Yugoslavia, and so forth. This would require that the team be headed or staffed by people with that kind of experience, rather than merely using nationals in their own country.

Cleared with & cc: Mr. Lerdau

cc: Messrs. Gulhati
T. King
de Vries
Chaparro

GPfeffermann:jd

Research gen

Mr. Martin Wolf, South Asia September 18, 1975

Orville F. Grimes, Jr., VPD

Research on India

1. As you requested, I attach your list of economic studies on India carried out under the External Research Program and suggest a number of changes:

a) Our coding has changed; project number 214 is now 670-14, and so forth. Projects whose old numbers were 300 and above now are referred to as 671-xx, as in 671-02 for 302. The change was made to have one code serve for all parts of the Bank -- for accounting records as well as reference by project supervisors. I suggest it be used here.

b) Please note that the status of 670-14, 670-21 and 670-70 is different from what you had.

c) "Effects of Health and Nutrition Standards on Worker Productivity" (671-15) will probably be carried out in Indonesia, Kenya and the Philippines; India does not figure in this project although it of course did in work done under its predecessor, "Substitution of Labor and Equipment in Civil Works."

2. Furthermore, you might wish to add the following:

| Code | Name | Brief Description |
|---|---|---|
| 671-10 | Promotion of Non-Traditional Exports | Carried out in cooperation with ECLA, focusing mainly on Argentina, Brazil, Colombia and Mexico. Expansion of coverage likely to include India. |
| 671-17 | Analytics of Change in Rural Communities | Contains land tenure study using data from Brazil, India and Malaysia. |

OFGrimes:gm

| | | |
|---|---|---|
| 671-30 | Structure of Rural Employment, Income and Labor Markets | Will estimate household labor supply curves and household demand curves for hired labor. Countries involved are India, Nigeria and Turkey |
| 671-33 | Ability Characteristics as Factors of Production | Uses data generated under "Labor Force Participation, Income and Unemployment" (670-45) to identify ability characteristics relevant for explaining variations in labor incomes. |

OFGrimes:gm

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

F-1233

# OFFICE MEMORANDUM

TO: Mr. O.F. Grimes

DATE: September 17, 1975

FROM: Martin Wolf MW

SUBJECT: INDIA -- Country Program Paper

I attach the last page of the sector and economic work program for India, which is attached to the draft CPP. As you will see, I have listed the research projects, completed or ongoing, on India and have, in fact, commented upon these in the text, in order to give a more rounded picture of the work being done on India. However, the information presented is that contained in the last report to the Board on research. I would be grateful if you would add at the bottom the relevant information for any studies of India approved since that last report, and would check on whether my description of these projects as either completed or ongoing, is correct.

Attachment
MWolf:ll

| | FY76 | FY77 | FY78 | FY79 | FY80 | Total FY76/80 |
|---|---|---|---|---|---|---|
| | (Manweeks) | | | | | |
| Transportation Ports as an Export Bottleneck 1/ | - | 40 | 40 | - | - | 80 |
| TOTAL SECTOR WORK | 605 | 680 | 410 | 210 | 210 | 2,115 |
| (of which Projects) | ( 83) | (103) | - | - | - | |
| (of which Country Programs) | (137) | ( 92) | - | - | - | |
| (of which Others) | (295) | (245) | - | - | - | |
| TOTAL ECONOMIC AND SECTOR WORK | 775 | 910 | 740 | 530 | 450 | 3,405 |
| (of which Projects) | ( 83) | (103) | - | - | - | |
| (of which Country Programs) | (297) | (262) | - | - | - | |
| (of which Others) | (295) | (295) | - | - | - | |

ECONOMIC STUDIES
EXECUTED UNDER RESEARCH BUDGET

| Code No. | Name of Studies | |
|---|---|---|
| ~~214~~ 670-14 | Agriculture Mechanization Study in India | ~~Completed~~ Ongoing |
| 221 | Export Promotion and Preferences: India | Completed |
| 226 | Substitution of Labor and Equipment in Civil Works | Ongoing |
| 227 | Highway Design Standards Study, Phase II | " |
| 241 | The Urban Data Needs of the IBRD | Completed |
| 245 | Labor Force Participation, Income and Unemployment | Ongoing |
| 250 | Mechanization in India: Its Extent and Effects on Hired Labor | Completed |
| 268 | International Comparison Project | Ongoing |
| 270 | Urban Public Finance and Administration | ~~Completed~~ Ongoing |
| 671-02 | Population Growth and Rural Poverty | Ongoing |
| ~~319~~ | ~~Effects of Health and Nutrition Standards on Worker Productivity~~ | |

1/ Combination Sector Updating/Project Identification Study.

Reseach gen.

Mr. Marcelo Selowsky, Acting Division Chief, DRCID

September 17, 1975

Gregory B. Votaw, Director, EA&P Programs

Research Proposal: Income Distribution in Thailand

1. I have reviewed your proposal for a research study on income distribution in Thailand with the Programs Division and Bangkok Resident Mission. We are impressed with the preparatory work already done and fully support the project. It is, however, very important to the department that the content and timing of the project be such that it satisfies the Thai Government's and our needs as well as DRC's.

2. It is our understanding that NSO has released the tapes from the 1971-73 household income and expenditure survey to the Bank on the promise that we will proceed quickly and focus on policy issues affecting income distribution in Thailand. Thus, once we have a final proposal and time schedule for the project, we should seek written confirmation from the Thai Government that it is in line with their expectations.

3. The 1971-73 surveys, which are the subject of the first phase of the study have some statistical shortcomings which limit the usefulness of the data, and major changes in prices and wages since 1972 would make policy conclusions based on 1971-73 data of doubtful value in any case. Therefore, if the study as a whole is to be relevant for economic policy, the real pay-off will come from Phase II.

4. To obtain useful policy results from the Phase II study requires:

(a) that we satisfy RTG with our work on Phase I so that we are given immediate access to the 1975/76 tapes;

(b) that the priority in Phase I be given to issue identification and development and testing of the methodology for analyzing the 1975/76 data rather than to analysis of the 1971-73 data per se or to inter-country comparisons; and

(c) that analytical and policy guidance from economists familiar with Thailand will be carefully integrated into both phases of the study.

5. The above considerations lead me to two conclusions. First, we should definitely plan on a two phase study of about three years' duration; for, only in the event of running into unforeseen difficulties in Phase I would we not want to proceed with Phase II. And, second, the responsibilities of our two departments for the study need to be clearly defined, and full agreement reached on scope, timing, topics to be investigated, and general management. Alternatively, the principal researcher could be assigned to this Department, making the study a departmental or regional project, with assistance from DRC.

cc: M. Blobel, N. Gibbs

LHinkle/WCFBussink:ms

Research

Research Committee Members

September 16, 1975

B. B. King, VPD

Research Committee Meeting

1. The next meeting of the Research Committee will be on Thursday, October 23, 1975 at 3:00 p.m. in Room E1201. The full agenda and papers relating to the meeting will be sent to you soon.

2. With research project evaluation and a few panel reviews scheduled for later this month, we felt it a bit much to meet to discuss the "Proposal for a Research Strategy and Program in Education" paper distributed to you at the July meeting. We propose that it be reviewed at the October 23 meeting. In the meantime, written comments, especially on Section IV (pages 12-16) are still encouraged. We would be pleased to extend the time period for these comments, which should be addressed to me with copies to Messrs. Ballantine, Gulhati and Simmons, to Friday, October 10.

Distribution:

H. Chenery, B. Balassa B. de Vries, H. Hughes, A. Karaosmanoglu, E. Lerdau, H. Schulmann, W. Thalwitz, H. van der Tak, H. Vergin, J. Waelbroeck, M. Yudelman

cc: O. Grimes, M. Hazzah

OGrimes:gm

Research gen

Mr. Ian Bowen, Finance & Development September 16, 1975

Orville F. Grimes, Jr., VPD

F & D Articles from Bank Research Projects

Attached is a list of Bank research projects recently completed and now being evaluated. The "Relevant Output" column lists reports which stem directly from these projects or are closely connected with them. We would appreciate your help in finding out whether any of these projects have also given rise to articles in Finance and Development. A perusal of the last three years' issues did not turn up any articles with clear links to Bank-sponsored research, but we may have missed some more subtle clues.

Attachment

cc: Mr. B. B. King
Mrs. M. Hazzah

OFGrimes:gm OG

OUTPUT OF PROJECTS TO BE EVALUATED

| Project | Title | Evaluation Supervisor | Relevant Output | Available From |
|---|---|---|---|---|
| 670-04 | Multi-Level Programming: Ivory Coast | Karaosmanoglu | L. Gereux et al, Interdependence in Planning: Multi-Level Programming Studies of the Ivory Coast (draft book, forthcoming). | Development Research Center |
| 670-05 | Cross-Section Analysis of the Development Process | Hughes | 1. H. Chenery and M. Syrquin, Patterns of Development 1960-1970, Oxford University Press, 1975.<br>2. H. Chenery and N. Carter, "Foreign Assistance and Development Performance, 1960-1970," American Economic Review, May 1973. World Bank Reprint No. 9. | Publications<br>Publications |
| 670-10 | Economy-Wide Planning Models | Karaosmanoglu | C. Blitzer, P. Clark and R. Norton, eds., Economy-Wide Models and Development Planning. Oxford University Press, 1975. | Publications |
| 670-12 | Reappraisal of Credits for Farm Mechanization in Pakistan | Vergin | John P. McInerney and Graham F. Donaldson, "The Consequences of Farm Tractors in Pakistan", Working Paper No. 210, February 1975. | Publications |
| 670-15 | Agriculture Research and Productivity Changes | Yudelman | R. Evenson and Y. Kislev, Agricultural Research and Productivity, Yale University Press, 1975. | Publications |
| 670-16 | Agricultural Sector in Mexico | van der Tak | Documents A-J, memo from R. Norton, September 10, 1975. | R. Norton |
| 670-19 | Expansion in Manufacturing for Exports in Developing Countries | Balassa | 1. T. Ozawa, "Labor Resource-Oriented Migration of Japanese Industries to Taiwan, Singapore and South Korea," Working Paper No. 134, August 1972.<br>2. Y. Chang, "Expanding Employment Opportunities in LDC Export Manufacturing Industry: An Analysis of the Offshore Activities of the Japanese Electronics Industry," mimeo, March 1973. | Publications<br>Research Library |
| 670-21 | Export Promotion and Preferences: India | Balassa | 1. D. Wall, "Export Development and Promotion Policies," mimeo, 1972.<br>2. D. Wall, "The Impact of the Generalized Scheme of Preferences on India's Exports," mimeo, 1973. | L. Westphal or Research Library<br>L. Westphal or Research Library |
| 670-30 | Impact on Port Congestion of Ship Rescheduling | van der Tak/Ray | Asian Institute of Technology, "Application of State Department Queuing Models for Analyzing Ship Arrival Rates at Ports," mimeo, November 1972. | Research Library or P. Taborga |
| 670-31 | Promotion of Construction Industry | Hughes | J. de Wilde et al, "A Framework for the Promotion of Construction Industries in the Developing Countries," Working Paper No. 168, November 1973. | |
| 670-32 | Compilation of Highway Design Standards | Thalwitz | F. W. Cron, A Review of Highway Design Practices in Developing Countries. World Bank, May 1975. | Publications |
| 670-33 | Railway Traffic Costing Study | Thalwitz | F. Sandler, Railway Traffic Costing (Blue Cover Report No. 472). | Reports Desk |
| 670-34 | Urban Transport and the Automobile | Schulmann | W. Owen, "Automobiles and Cities: Strategies for Developing Countries," Working Paper No. 169, September 1973. | Publications |
| 670-36 | Property Values and Water Supply | Churchill | Roy W. Bahl, Stephen Coelen and Jeremy J. Warford, Estimation of the Economic Benefits of Water Supply and Sewerage Projects, Metropolitan and Regional Research Center, Syracuse University, October 1973. | J. Warford |
| 670-37 | Village Water Supply | Rajagopalan | R. J. Saunders and J. J. Warford, "Village Water Supply and Sanitation in Less Developed Countries" (Public Utilities Report No. HES 2, Central Projects Staff, March 1976. Revised version currently with Publications Committee. | P. Peter |
| 670-38 | Village Electrification | Waelbroeck | 1. Issues Paper "Rural Electrification" (Report No. 517, April 1974). Scheduled for publication in October 1975.<br>2. D. Anderson, "Costs and Benefits of Rural Electrification: A Case Study in El Salvador" (Public Utilities Report No. HES 8, Central Projects Staff, February 1975). | P. Peter |
| 670-39 | Pricing and Investment in Electricity Supply | Waelbroeck | D. Anderson and R. Dorvey, Electricity Economics (forthcoming World Bank publication). | Secretary to D. Anderson |
| 670-46 | Cost Effectiveness of Alternative Learning Technologies in Industrial Training | Kuczynski | M. Zymelman et al, "Cost Effectiveness of Alternative Learning Technologies in Industrial Training -- A Study of In-Plant Training and Vocational Schools," Working Paper No. 169, December 1973. Scheduled for publication as Occasional Paper. | Publications |
| 670-48 | Economic Issues of Health | Schulmann | P. Newman, "A Conceptual Framework for the Planning of Medicine in Developing Countries," Working Paper No. 154, May 1973. | Publications |
| 670-50 | Mechanization in India | Vergin | 1. Brian Lockwood, "Notes on Farm Mechanization and the new Technology in Indian Agriculture," April 1972.<br>2. Brian Lockwood, "Patterns of Investment in Farm Machinery and Equipment in Indian Agriculture," 1972. | Research Library (sent to manned copy center 9/5/75) |
| 670-51 | Survey of Non-Formal Rural Education | Yudelman | P. Coombs and M. Ahmed, Attacking Rural Poverty, Johns Hopkins University Press, 1974. | Publications |
| 670-75 | Rural and Urban Public Works | van der Tak | J. Thomas et al, "Employment and Development: A Comparative Analysis of the Role of Public Works Programs," mimeo, April 1975. | R. Hofmeister |
| 670-77 | Financing of Small-Scale Industry | de Vries | 1. "Financing Small Scale Industry," Working Paper No. 191, November 1974.<br>2. Country Studies: Colombia, Guyana, Iran, Korea, Singapore, Trinidad and Tobago, Tunisia and Zambia. | Publications<br>L. Westphal |
| 670-81 | Comparative Analysis of Resource Allocation in Cocoa Production | Balassa | P. Yeung, "Comparative Analysis of Cocoa Production in Selected Countries," Sec M74/524, July 1974. | Secretary's |

September 15, 1975

September 15, 1975

Mr. Peter Ruof
International Division
The Ford Foundation
320 East 43rd Street
New York, New York 10017

Dear Mr. Ruof:

Mr. Stern wrote to you on September 8 about the Laval Atlas project. Our subsequent review confirms his doubts about it. Consequently, we do not intend any further action.

Takayama was here last week discussing his project and gave a seminar. I am glad to report that our collaboration on this project is going well.

Yours sincerely,

Benjamin B. King
Research Adviser
Development Policy

cc: Mr. Tims

BBKing:gm

Research gen

Mr. John King, VPS September 10, 1975

B.B. King, VPD Signed B. B. King

Project Monitoring - Research Proposal

1. A couple of months ago we received the attached preliminary proposal from the East Africa Region, which we would in ordinary circumstances put through the usual procedures for the next Research Committee meeting in October. The proposal has been seen by the Agricultural and Rural Development Department in CPS and by the Employment and Rural Development Division in DPS, among others.

2. There is general support for the objective of the proposal which is to try to replace monitoring systems in rural development projects which don't work by ones which do -- with obvious objectives beyond this for the improvement of the projects themselves. There is less support for the present proposal per se; this is a Bank-wide problem and should be treated as such; outside consultants might not be the best vehicle; and so on (see attached memos). There is a question whether, in its present form, this is a research project, narrowly defined, and, if so, whether it is the right one.

3. Even if there are objections to the proposal, I think the initiative of the East Africa Region deserves constructive support, if we want to match our confidence in rural development projects by understanding what they accomplish. So, I do not want to put the research project through a process which would probably end up raising objections that have already been raised. If this is a Bank-wide problem and a lot of people are busy thinking or doing something about it (or both), it would be preferable to put all the pieces together and formulate a joint plan of action, in which the East Africa initiative in one form or another can play a part. We could also settle, at least tentatively, the non-substantive questions of budgetary sources for this activity.

4. It seems to me that the lead in this matter should come from CPS. That is why I am addressing this note to you.

Attachments

cc: (w/o att.)

Messrs. Yudelman
Darnell
Christofferson
Leiserson
Anderson

Messrs. Please
Adler
Hendry
Walton
Mrs. Lele

FORM NO. 75
(7-73)

WORLD BANK GROUP

| ROUTING SLIP | DATE September 9, 1975 |
|---|---|

| NAME | ROOM NO. |
|---|---|
| King ~~Mr. Tims~~ | |
| Mr Stern | |
| de Gaulle could not have done better; I agree | |
| So do I | |

| | | | |
|---|---|---|---|
| | APPROPRIATE DISPOSITION | | NOTE AND RETURN (EJ) |
| | APPROVAL | | NOTE AND SEND ON |
| | COMMENT | | PER OUR CONVERSATION |
| | FOR ACTION | | PER YOUR REQUEST |
| | INFORMATION | | PREPARE REPLY |
| | INITIAL | | RECOMMENDATION |
| | NOTE AND FILE | | SIGNATURE |

REMARKS

I may be prejudiced, but this seems a manifestation of Quebec nationalism, of no interest to us. Do you agree? If so, I will tell Ruof.

| FROM | ROOM NO. | EXTENSION |
|---|---|---|
| Benjamin B. King | F1233 | 6001 |

Rejected proposals?

September 8, 1975

Mr. Peter Ruof
International Division
The Ford Foundation
320 East 43rd Street
New York, New York 10017

Dear Mr. Ruof:

I am sorry I did not respond to your letter earlier, but first I was away and then the Annual Meeting madness descended. I have circulated the announcement of the third round of Ford's International Economic Order competition to our Regional Chief Economists and the Department Directors in the DPS. Regarding the atlas of cultural and technical resources, I am rather dubious that the World Bank would be in a position to finance such an activity, but I have turned the project description over to Mr. Benjamin King, our Research Adviser, and asked him to contact the University of Laval directly.if he believes we can pursue this matter further.

Sincerely,

Ernest Stern
Director
Development Policy

cc: Mr. King