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RESEARCH ADVISORY PANEL
Meeting JUNE 1979



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Research Advisory Panel

Meeting June 6-8, 1979

- schedule, members

- 5th draft of Report of
GRAP

- MS. notes

- comments/memos

Report of the
General Research Advisory Panel

August 1979

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General Research Advisory Panel

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Summary and Principal Recommendations

I. Introduction

1. The present General Research Advisory Panel was asked to evaluate the Bank's economic research program and to make recommendations for the future. The Panel has relied on the reports of Specialized Research Advisory Panels in the fields of agriculture and rural development; commodities; income distribution and employment; industrial development and trade; energy, water and telecommunications; and transportation, as well as on the reports of external advisory panels which have examined the entire range of Bank activities in the areas of population and education. The recommendations of the Panel are summarized below.

II. The Bank's Role in Research

2. Objectives and Criteria. The Bank's research objectives must be stated in relation to the policy needs of its member countries as well as its own analytical requirements. While focusing on its operational needs, the Bank should not neglect the contribution to the understanding of the development process that its central position makes it particularly qualified to provide.

3. We endorse the four objectives of Bank research formulated in 1971:

- (i) To support all aspects of the World Bank's operations including the assessment of development progress in member countries;
- (ii) To broaden understanding of the development process;
- (iii) To improve the Bank's capacity to give policy advice to its members;
- (iv) To assist in developing indigenous research capacity in member countries.

4. We further suggest that the Bank should rely on exploiting its comparative advantages in research, which may be defined as follows:

- (i) The Bank should capitalize on the skills and information that it acquires through its activities as a lender and as an adviser. However, fruitful analysis of data presupposes an adequate conceptual framework, so we would expect some part of the Bank's research program to be concerned with theory.
- (ii) The Bank should excel in comparative studies, though its program should not be confined to work of this kind.

(iii) The Bank is exceptionally well placed to handle larger investigations involving several manyears of research time, and we would expect rather more than half of its research manpower to be engaged on projects of this kind. However, many medium and small projects will also qualify for inclusion in the program, because they exploit the Bank's comparative advantage in data and experience, and because of their relevance to the Bank's immediate needs. In any case, the Bank should not embark upon an investigation unless it is willing to commit sufficient resources to see it through.

5. Relations with Other Research Organizations. As a major actor in the field of development research the Bank has a responsibility to consider the impact of its activities and decisions on other organizations active in the field. In general we would encourage the Bank to adopt a more collaborative research stance than it has in the past.

6. Researchers in Developing Countries. We endorse the general idea of collaborative research as the major instrument of interaction between the Bank's research program and developing country researchers and recommend that the number of such collaborative projects be increased. We also urge the Bank to exploit the opportunities for collaboration represented by studies financed under loans and credits as well as studies undertaken in connection with country economic and sector work. Furthermore, we recommend that the Bank join with other funding organizations in the support of regional research institutions and that it offer postdoctoral fellowships to researchers associated with institutions in developing countries for research to be undertaken at the Bank. Finally, the Bank might support the creation of socioeconomic research institutions as projects to be financed under Bank and IDA loans and credits.

7. Researchers in Developed Countries. We endorse the general reluctance of the Bank to finance research by institutions in developed countries. We recognize that cases may arise where special expertise is needed which is only available from institutions or consultants in developed countries. We would encourage the Bank to play a coordinating role in research involving developed and developing country researchers when it can do so at minimal financial cost.

8. Other International Organizations. It is our impression that a good deal more can and should be done to insure effective collaboration on research among the Bank and other international agencies. In particular, the Bank should be very active in communicating its research plans and inviting comments on them, while continuing of course to make its own decisions on what research to undertake.

9. Data Collection. We recommend that the Bank make a systematic effort at documenting and inventorying data generated by its research and operational efforts and that it establish the necessary in-house capability

in the specialist functions that statistical expertise and data management involve. However, expenditure by the Bank on primary data collection should be related mainly to specific data needed for its research or lending operations or to specific topics for which it feels a particularly urgent need. Finally, we recommend that the matter of data collection on income distribution and employment, raised by the RAPIDE panel, be studied by specialists in the field who would examine:

- (i) How a program in this area might be organized from a few pilot surveys to a more systematic effort aimed at producing international comparability.
- (ii) In what ways the Bank might contribute to organizing and supporting such an undertaking.

III. The Organization of Research Within the Bank

10. The Research Community. While it is difficult for us to enter deeply into organizational questions, it seems possible to suggest some criteria for improving the present organization. Among them would be the following:

- (i) The need for a minimum critical mass, which is now lacking in certain areas.
- (ii) The need to balance the requirement of continuity of research by individuals against operational involvement.
- (iii) The need for a balance to be struck between the use of staff and of consultants on individual projects.

11. Influence of Operations on Research. Additional machinery is needed to bring research and operational staff closer together in the generation of research programs. We suggest that for major areas of research the Bank create 'Steering Groups,' consisting in about equal numbers of suppliers and consumers of research in that area.

12. Other Social Scientists. A final issue relating to the organization of the research community within the Bank is the role of non-economists. Bank research has been dominated by economics. However, with the Bank's more purposive attempts to encourage and support social change and to comment on such change, the Bank will need social scientists in other fields, particularly sociology and political science.

IV. Research Applications, Dissemination and Training

13. Application of Research within the Bank. As the research program has come of age, there are increasing demands for research applications from the operational departments. Since there are no explicit budgetary and staff allotments for this purpose at present, there is a problem of promoting the application of new analytical techniques in the Bank.

14. In cases where highly specialized skills are involved (such as the construction of sector programming models) it would be worthwhile to establish a special unit to undertake applications of these techniques on a Bank-wide basis. Apart from such highly specialized modelling, most applications can be undertaken by CPS and DPS professionals, and we recommend that the CPS and DPS staff be increased by six man years for the purpose of research application.

15. Parallel to this strengthening of the central staff, the Bank should stress the role of regional Chief Economists in articulating regional research needs and in the application of research results in country economic, project and sector work. The Chief Economist should be provided with additional staff for this purpose. For the immediate future, we would suggest appointing one senior economist, with wide interests and some research experience, in the office of each Chief Economist, to concern himself primarily with the promotion of research and the application and dissemination of research results. This number could be increased as the work expands.

16. Dissemination and Training in the Bank. Apart from the existing modes of research dissemination, we would suggest that brief reports be prepared on the findings of individual research projects, which should highlight the relevance of the results for the operational and policy work of the Bank. Furthermore, we recommend that state-of-art papers be prepared to review research areas that are of particular interest to operational staff and that seminars be organized, using these papers as inputs. A further spur to assimilation of research by operating staff would be provided if researchers participated in reviewing the output of operational economists in their field. Dissemination and training objectives would also be served by extending the rotation of Bank staff, expanding the scope of sabbaticals and instituting advanced training programs.

17. Research Application and Dissemination Outside the Bank. We suggest that the Bank extend the distribution of its research related documents to all research institutions of some standing in the developing countries, as well as to institutions working on development problems in the developed countries. More frequent arrangements should be made for authors to visit developing countries and hold seminars on their results. To the extent possible, research results should be introduced into courses at the Economic Development Institute. The Bank's resident offices should play a role in ensuring proper linkage with the local research community.

18. In cases where Bank research has produced new techniques, there is sometimes demand for training in such techniques from member countries, beyond what can be accommodated through the use of existing staff and budgets. The use of specialized consultants may be the most effective answer to this problem, and the Bank should be willing to share the cost involved, not out of the research budget, but as a part of its general budget.

V. Size and Priorities

19. Size. We begin with the observation that the development process in most of its aspects is still insufficiently understood and that more research on development issues is strongly warranted. While there are other individuals and organizations able to contribute to the needed research, there is a prima facie case for additional Bank-financed social science research on development. The need for such research is urgent and the Bank is well equipped to undertake it. We find the Bank's research record to be good in terms of quality and usefulness and an increase in Bank research seems both desirable and feasible.

20. Our recommendations for increased collaboration and institution building, data management and retrieval, and expanded dissemination and application would by themselves cost about \$3.5 million a year at today's prices. In addition we recommend that aggregate expenditure on socioeconomic research (as defined in the administrative budget) be expanded at a rate up to ten percent a year in real terms, which cumulates to about 60 percent over 5 years. The ten percent expansion of the research program would be about \$1.0 million in the first year. Another review like the present one might be commissioned in about five years to make recommendations for the subsequent period.

21. Priorities. We endorse the past movement in Bank research to such newer fields of Bank emphasis as agriculture and rural development, urbanization, and income distribution and suggest that over the coming period still further shifts in emphasis may be warranted. We have also reviewed the list of research topics proposed by the various specialized panels and selected those which appear to us to be of particular importance for the Bank to undertake. We have further suggested topics of our own in areas not covered by the specialized panels. However, precise allocations among types and fields of research, and the choice of particular projects, are matters which the panel considers can only be decided by the Bank, taking into account such factors as the availability of particular skills in the staff, and the comparative quality of research proposals. We would not wish any list of ours to inhibit the Bank in these managerial functions, whether by pushing topics of which the Bank is doubtful, or excluding topics it might otherwise favor.

Chapter I

Introduction

1.01 Research has been an established part of the World Bank's economic work for over twenty years. In the latter half of the 1960's, Bank research activities began to expand in response to the diversification in Bank operations. In 1971, the Bank created a separate, centralized budget for research. At the same time a standing committee known as the Research Committee was established to formulate guidelines for Bank research and to administer the Bank's research budget. Four objectives for Bank research were enunciated in 1971. They are:

- (i) To support all aspects of the World Bank's operations including the assessment of development progress in member countries;
- (ii) To broaden understanding of the development process;
- (iii) To improve the Bank's capacity to give policy advice to its members;
- (iv) To assist in developing indigenous research capacity in member countries.

1.02 Most individual research projects are reviewed on completion, but since 1977 the Bank has sought more comprehensive reviews of its research activities in a number of areas. Specialized Research Advisory Panels (SRAPs) of outside experts have evaluated the Bank's research in agriculture and rural development; commodities; income distribution and employment; industrial development and trade; energy, water and telecommunications; and transportation. These panels have assessed the quality and relevance of past Bank research in their respective fields, identified important areas for further research and provided their views on the special contribution that the Bank could make in such research. The reports of the SRAPs also make valuable comments on such general issues as the organization of Bank research, relationships between producers and users of research within the Bank, and the Bank's relationships with research institutions in member countries. In addition to the SRAPs, external advisory panels have examined and reported on the entire range of Bank activities in population and education. These panels have commented on Bank research activities in these fields, and we have read these observations with care. 1/

1/ Annex I lists the members of these panels and their reports.

1.03 The present General Research Advisory Panel was established to provide judgments on general issues concerning the Bank's research posture in the future. Our draft terms of reference defined this task as follows:

"The primary objective of this review will be to assess the size of the overall research program and its character and balance. This should be done in the light of the Bank's operations in, and advisory services to its member countries, with consideration given to the role it should play in increasing worldwide understanding of the development process."

The panel was also asked to assess whether the objectives presently enunciated for the program (cited in para 1.01 above), needed reformulation or ordering in terms of priority.

1.04 The panel was invited to establish its own final terms of reference after its meetings with Bank staff. Our deliberations have been concerned with the following broad questions:

- (i) What should be the objectives of the Bank's research program?
- (ii) What are the Bank's research needs?
- (iii) What kinds of research is the Bank most suited to undertake?
- (iv) What policies should guide the Bank in its relationships with other research institutions and other researchers? What responsibilities should the Bank assume toward the development of indigenous research capacity in member developing countries? How best can it sponsor such development, given its own needs and abilities?
- (v) What role and responsibility are appropriate for the Bank in the generation, management and dissemination of data?
- (vi) What improvements are needed in the organization and execution of research by the Bank?
- (vii) How can the Bank better assimilate the fruits of its research in its operations? How can it better propagate these results to its other chosen audiences?
- (viii) What has been the quality of Bank research, and how useful has it been to Bank operations?
- (ix) What is the appropriate size for the Bank's research program?
- (x) What are important areas of research for the Bank to enter in the future, given its objectives, aptitudes and needs?

We have been conscious of the intrinsic difficulty of answering many of these questions, especially for a group of outsiders not very familiar with the internal workings of the Bank.

1.05 The Panel has had some difficulty obtaining a complete picture of the Bank's contributions to research on development. This is in part because the Bank's activities are naturally diverse; the Bank is involved through its projects, its policy advice, and otherwise, in seeking to apply what is known and what is being learned about the entire complex, sprawling subject called "development." Our difficulty also stems in part, in our opinion, from the fact that the Bank has become increasingly involved in research over the past decade in a variety of ways and from several different sources of initiative, without bringing the whole picture together in any publication or organizational unit. At present, the Bank's contribution to research breaks into at least five parts:

- (i) Research funded in part from a central research budget (known as the "external research budget") and allocated through the Research Committee, amounting in fiscal year (FY) 1978 (including the value of staff time) to about \$6.2 million (in FY79 dollars). Of this amount, roughly \$600,000 was spent on contracts with researchers and research institutions in developing countries.
- (ii) Research financed from departmental budgets and not subject to central review, amounting in FY78 to about \$4.1 million, also in FY79 dollars.
- (iii) The Bank's contribution to international collaborative research in agriculture (the Consultative Group for International Agricultural Research (CGIAR)) amounting in calendar year 1978 to about \$8.7 million, and the Bank's involvement in the Tropical Diseases Research and Training Program for which it currently acts as co-sponsor and fiscal agent.
- (iv) Studies financed by member countries under loans and credits from the Bank; though accurate data using consistent definitions are not available, the research element in these studies may in recent years have been as much as \$20-\$30 million.
- (v) Loans and credits for building up research capacity in developing countries (perhaps \$120 million in FY78, most of it for agricultural research and extension projects).

1.06 Several comments should be made about these categories. The Bank as an operating organization is primarily concerned with applied research, both in its own staff work and by its member countries, and in any such situation the line between research and its application is inevitably uncertain. The preceding paragraph does not take account of some of the work

undertaken in the Bank's regular program of economic and sector analysis, which could as well be called applied research. We are not troubled by this lack of precision in accounting, and have not tried to pursue unduly fine distinctions.

1.07 As is evident from para 1.05, the Bank has in the past funded both technological research and socioeconomic research. This report is limited to the Bank's activities in the area of social science research, particularly research in economics. We nonetheless believe technological research is important, and that technological and socioeconomic research can often reinforce each other in very important ways--as shown, for example, by the international agricultural research centers. We are aware of the Bank's desire to review its position as far as technological research is concerned, and we believe there may be important opportunities for additional Bank financing. Accordingly, we suggest that a further panel (or panels) focusing on technological research might be helpful.

1.08 The deliberations of our panel have been conducted in Washington, where we have had the opportunity to obtain the views and assistance of Bank staff. In addition, individual members of the panel have consulted with the chairmen of the specialized panels.

1.09 The report is organized as follows. Chapter II discusses what kinds of research the Bank should finance and the nature of its relationships with other research institutions. It also discusses the Bank's role and responsibilities in the area of data collection and management. Chapter III examines the organization of research within the Bank. Chapter IV is concerned with the dissemination and absorption of the results of the Bank's research. Chapter V assesses the appropriate scale of the research program, research priorities for the future, and balance between major sectors. An appendix summarizes the recommendations regarding future research priorities presented in the reports of the eight advisory panels.

Chapter II

The Bank's Role in Research

2.01 The Bank plays a variety of roles in development research. Over the last decade it has emerged as a major producer of such research and is now a significant part of the world-wide community of researchers on development issues. The Bank is also a major consumer of research results, whether generated by its own research activity, or by the work of other persons and institutions. To some extent the Bank is a contributor to the development of research capacity in developing countries. The objectives of the Bank's research program, the criteria for choice of topics, and the method of execution should reflect this diversity of interests. In this chapter we articulate some general principles that might assist in defining research strategy for the future, taking due account of research capability elsewhere, and the abilities and needs of the Bank. As noted already (para 1.07) we discuss here only the Bank's role in social science research.

2.02 We begin by discussing the objectives of Bank research and the criteria that should guide the Bank's choice of research areas. We then sketch the appropriate relationship between the Bank and the other major participants in development research: research institutions and scholars in both developing and developed countries, and other international organizations. We conclude with a discussion of the role that the Bank should play in the collection, management and dissemination of data. We have chosen to examine this issue both because data are a prerequisite for research, and because the Bank's responsibilities for primary data collection were discussed in the reports of several of the specialized panels.

Objectives and Criteria

2.03 Since the Bank has become one of the largest sources of research on economic development, its research objectives must be stated in relation to the policy needs of its member countries as well as its own analytical requirements. While focusing on its operational needs, the Bank should not neglect the contribution to the understanding of the development process that its central position makes it particularly qualified to provide. In this context we endorse the four objectives of Bank research stated in paragraph 1.01. In the remainder of this chapter we suggest ways in which the Bank may be able to achieve a better balance among these objectives.

2.04 At the most immediate level the Bank's own use of social science research can be considered under two heads: research whose results are likely to influence the design of projects for which the Bank lends, and research that is of importance for the Bank's more general policy functions. These functions include the Bank's role as an advisor to developing countries and the development of the Bank's own policies.

2.05 These lending and policy activities require the Bank to use the results of a wide range of analytical techniques. The Bank's larger role as a leading development institution requires it to keep abreast of current thinking on development processes, and to use the results of both theoretical and empirical research. The Bank should not be content with the state of the art as it finds it, but has an obligation to advance the debate on the objectives and instruments of development.

2.06 To say that the Bank has these varied research needs is not to say that it should attempt to meet all of its needs through its own staff, nor that it should necessarily finance the entire spectrum of research. Nonetheless we feel that a balanced research program for the Bank must necessarily continue to be a blend of project and sector level research, applied country and international analysis and more fundamental analysis of the structure of developing countries and of the development process.

2.07 There remains a need to define more specifically the kinds of research the Bank should seek to undertake. Here we think the decisions should be guided by the special advantages that the Bank enjoys as a research organization, and by its own requirements. As a general proposition the Bank should not embark upon topics that are already adequately covered by other institutions. It should on the contrary rely on exploiting its comparative advantages which may be defined as follows:

- (i) The Bank should capitalize on the skills and information that it acquires through its activities as a lender and as an adviser. Particular attention should be given to making use of the Bank's project experience and the data generated in Bank projects. However, fruitful analysis of data presupposes an adequate conceptual framework, so we would expect some part of the Bank's research program to be concerned with theory.
- (ii) The Bank should excel in comparative studies, though its program should not be confined to work of this kind.
- (iii) The Bank is exceptionally well placed to handle larger investigations involving several manyears of research time, and we would expect rather more than half of its research manpower to be engaged on projects of this kind. However, many medium and small projects will also qualify for inclusion in the program, because they exploit the Bank's comparative advantage in data and experience, and because of their relevance to the Bank's immediate needs. However, the Bank should not embark upon an investigation unless it is willing to commit sufficient resources to see it through.

2.08 Despite the advantage that the Bank ought to enjoy in project-related research, it has not made much use of its project experience or project data for research purposes. This side of Bank research needs to be strengthened. In recent years the Bank has begun regular evaluations of completed lending projects and has increasingly built monitoring and evaluation components into the projects it finances. These should provide additional material and ideas for project-oriented research.

Relations with Other Research Organizations

2.09 As a major actor in the field of development research, the Bank has a responsibility to consider the impact of its activities and decisions on other organizations active in the field. We discuss in subsequent paragraphs the relationships of the Bank's research program to research institutions in developing countries, research institutions in developed countries, and international institutions. Before taking up those relationships, we mention two more general points.

2.10 The first is that the Bank's approach to its research activities has been primarily self-contained. Bank staff have identified research objectives; prepared, executed, and supervised research projects; and interpreted and disseminated the results. Researchers outside the Bank have been involved as consultants employed to assist in Bank-defined work. The principal reason for this tightly controlled research process has been the desire to establish research as a high-quality and useful activity in an organization mainly directed toward operational objectives.

2.11 There have plainly been benefits from this approach to research. It is our impression that research has been accepted and is now solidly established as an appropriate part of the Bank's normal activities. But there have been costs as well. To the outside research community the Bank has appeared somewhat aloof and unresponsive to opportunities for interchange and collaboration. While this impression appears to be exaggerated, we believe there would be much gained by the Bank adopting a more collaborative research stance, and we recommend that the Bank do so. In particular, we suggest that the Bank move toward other methods of research collaboration in addition to hiring outside consultants, and toward greater involvement of outside researchers in the assessment and guidance of Bank research. None of these ideas is new, and in a few instances the Bank has moved in these directions.

2.12 Second, we believe the Bank ought to play a larger role in promoting stronger and more coherent research efforts by the development research community. Research on development is conducted in many places around the world, by many individuals and groups. There can be great strength in this diversity, and we would not want to see any inhibition on the independence of researchers. But there is clearly need for initiative in arranging for periodic assessments of research progress in different fields; in encouraging the rapid spread and adoption of new research methodologies; in identifying promising new areas for future research; in doing many other things which will contribute to informing researchers and supporting them in doing better research. The Bank is in a

strong position to help with these objectives, as it has shown in some instances already, and we think it should do more along these lines. We are not, we emphasize, recommending that the Bank seek to lead or dominate the development research community - only that it play a part, along with many other organizations, in improving communications, assessments, and supporting arrangements among the world's researchers in the development field. We believe the increased openness by the Bank to external influences on its own research program, which we have earlier recommended, will put the Bank in a much better position to play a more constructive role in the larger research community.

(i) Researchers in Developing Countries

2.13 As was noted in paragraph 1.01, the Bank in 1971 declared one of its research objectives to be "to assist in developing research capacity in member countries." There are many ways in which this might be accomplished: by collaboration on research projects, by grants and loans to institutions, by award of fellowships and so on - and we have reviewed the Bank's activities in this area.

2.14 Thus far, the Bank has related to scholars in developing countries largely through collaboration on joint studies. There have been many such projects under the external research program, and the scope of association has been wide, ranging from assistance in data collection to subcontracting complete studies. The Bank has avoided making block grants to socioeconomic research institutions, or to individual scholars.

2.15 We endorse the general idea of collaborative research as the major instrument of interaction between the Bank's research program and developing country researchers and recommend that the number of such collaborative projects be increased. We feel that research capacity in a growing number of developing countries is now sufficiently sophisticated to make a valuable contribution to the substance of Bank research. Moreover, important institution building objectives can be achieved as a byproduct of research collaboration.

2.16 Certain difficulties however limit the opportunities for such partnership at present. First, the number of LDC research institutions adequately staffed for such research is still limited, and most of these have research priorities of their own which should be respected. The constraints faced by LDC institutions are only partly financial, and insofar as they are financial they can be alleviated by the Bank contributing to both direct and indirect costs in its collaboration agreements. A more fundamental obstacle in some countries is the limited number of trained personnel, and the demands for their services from universities, government departments and the private sector. Elimination of this deficit will take time.

2.17 Another limitation is imposed by lack of data. Countries differ substantially in the quantity and quality of available data; understandably, research has tended to concentrate on those countries where the data are

better. In a number of cases the Bank has sought to overcome this problem by financing the collection of data as a part of the research. This practice should continue in the future as appears appropriate in specific research contexts.

2.18 Collaborative research undoubtedly has certain costs. The structuring of collaborative agreements, the supervision of work plans, the monitoring of output and of quality are time consuming tasks. Collaboration with the weaker institutions may also involve higher risks of failure.

2.19 While we recognize that additional managerial overhead may be required, we regard collaboration as beneficial to both parties. The Bank should be prepared, within reasonable limits, to make the additional investment in time and money needed to foster research collaboration.

2.20 The Bank should, moreover, deepen the involvement of developing country institutions in its research projects and should strengthen the institution building aspects of its collaborative efforts. Collaboration agreements should provide time and budget allocations to cover the costs of bringing overseas researchers to Washington for limited periods. The technical expertise so gained would facilitate the future application of innovative techniques in the country concerned. This would be particularly desirable in comparative projects, where at present the country participants often are not involved in the later stages of the analysis.

2.21 It should be noted that the opportunities for collaborative analytic work with developing country researchers are not restricted to the external research program. There are often sizable research components financed by borrowing countries under project loans and credits. While the disposition of these funds is governed by the loan agreement between the Bank and the borrower, the Bank could play a more active role in providing technical support.

2.22 Similar opportunities are presented by the Bank's country and sector work program, which is several times larger than what is defined as research. A number of studies now carried out in connection with country economic work on income distribution, employment, exports, migration, etc., would constitute suitable topics for collaborative studies with local institutions. There are already examples of such collaboration and its expansion is under active discussion at the Bank.

2.23 We recommend two additional steps which we think will allow the Bank to combine its interest in high-quality research with its interest in strengthening research capacity in developing countries. The first is to join with other funding institutions in channelling research grants through regional research organizations which would assume responsibility for selection of qualified individuals and institutions as recipients of the assistance. Several organizations of this kind have been created in recent years. Such arrangements provide assurance of quality control to the Bank and other funding organizations without necessitating the staffing and

other costs that would otherwise be necessary to distribute research grants effectively. We would encourage the Bank to move cautiously but positively in the direction of making such research grants, in collaboration with other institutions. Experience suggests that supporting researchers in what they wish to do, in areas that coincide with the general research objectives of a funding organization like the Bank, can be a highly efficient form of research support.

2.24 The second step we recommend is for the Bank to offer a number of postdoctoral fellowships for research to be undertaken at the Bank. Each fellowship would be tenable for a limited period (say, two years at a maximum), and would be restricted to researchers who are firmly associated with institutions in developing countries. The Bank would have to decide the number of such fellowships it could have at any time: up to twelve persons might be feasible. Even a relatively small program could make a significant difference over time in stimulating local research activity in developing countries.

2.25 We further feel that the development of socioeconomic research institutions in developing countries could be a priority field for Bank action. Research in such institutions can be as important to development as a successful agricultural or transportation project. The Bank should therefore consider the feasibility of financing projects for building socioeconomic research institutions in the same way in which it selects projects for financing in other sectors. Institution building requires sustained efforts at creating or strengthening an organization, training staff at the predoctoral and postdoctoral levels, providing library and data management facilities, establishing strong contacts with leading research institutions elsewhere and promoting a generally stimulating environment. These requirements are best fulfilled within the context of self-contained projects covering a period of several years and financed with a proper balance of Bank loans, credits and grants. Temporary secondment of Bank staff may be helpful in some cases. Existing regional research institutions in developing countries merit special consideration, and in some places the Bank may wish to be associated with the establishment of new regional research institutions.

2.26 We feel it important that the Bank take an integrated view of the research work being undertaken in any given country with Bank finance, something which does not adequately happen at present.

2.27 To summarize, our view is that the Bank's main relationship with developing country researchers should be through collaborative research projects. The scale of such collaboration should be expanded, and the involvement of collaborating institutions deepened. In addition, such collaboration should be encouraged in contexts wider than the external research program. The Bank should take steps to strengthen the institution building aspects of such collaboration. Furthermore, we feel that institution building could be undertaken in a project context, and we would encourage the Bank to consider the feasibility of financing projects for the development of socioeconomic research institutions.

(ii) Researchers in Developed Countries

2.28 We turn next to the appropriate relationship between Bank research and research institutions in developed countries. Past contacts between the Bank and such institutions have been characterized by some of the same problems as those encountered with developing country institutions. In certain respects the situation is easier because developed country institutions are better staffed than their developing country counterparts. However, the managerial effort associated with such collaboration is only marginally less than that associated with developing country institutions. The Bank has on the whole avoided entering into formal collaborative arrangements with developed country research institutions, although such arrangements have characterized a few of the larger projects.

2.29 We endorse the general reluctance of the Bank to finance research in institutions in developed countries. We recognize that cases may arise where a special expertise is needed, which is only available from institutions or consultants in developed countries. There will also be cases where tripartite collaboration between the Bank, a developing country institution and a developed country institution is the best procedure.

2.30 The Bank's contribution to research on development undertaken in developed countries is not restricted to its financial contribution however. The Bank can sometimes undertake a coordinating role while only making a minimal financial contribution itself, and should continue to do so.

(iii) Other International Organizations

2.31 The Bank is not of course the only international institution doing research into the socioeconomic aspects of development. The greatest potential overlap is with the work of FAO, ILO and UNIDO; there is a smaller overlap with UNESCO and the UN itself. Collaboration is obviously necessary. In some cases--research on income distribution is probably a good example--there has been good communication and a series of valuable meetings among researchers from ILO, the Bank, and other agencies interested in research in that field. It is the panel's impression that a good deal more can and should be done to ensure effective collaboration on research among the Bank and other international agencies. At the same time, we do not mean to recommend a constraining effort toward uniformity: research flourishes on competition and the challenging of one researcher's results by other researchers. The guiding principle for the Bank to follow, in our judgement, is to be very active in communicating its research plans and inviting comments on them, while continuing of course to make its own decisions on what research to undertake.

Data Collection

2.32 As regards data required for research, the situation is somewhat paradoxical. Although the inadequacy of data is often cited as a major constraint on empirical research, it is also the case that the analytical potential of such data as exist is not usually fully exploited. While there are

several reasons for this state of affairs, an important one is the generally inadequate provision for the documentation and dissemination of research generated data beyond the initial researchers. Our impression is that within the Bank as well the arrangements for the documentation, archiving and subsequent retrieval of research-generated data are ad hoc, and fall upon the analysts rather than on specialized staff.

2.33 Bank-financed project operations also generate a wealth of data for research. These opportunities are only beginning to be exploited. The increasing practice of having monitoring and evaluation arrangements set up as part of the project is a promising development in this regard. We commend recent efforts to strengthen the technical support provided for monitoring and evaluation analysis. We strongly support this line of activity and are convinced of its potentially high value for research purposes.

2.34 The Bank should recognize that the data generated are an important output of its research and operational efforts. We recommend that the Bank make a systematic effort at documenting and inventorying such data (as has recently been initiated in the Education sector), and that it establish the necessary in-house capability in the specialist functions that statistical expertise and data management involve. Apart from making existing data available for further research such an effort would help to identify particular instances where new statistical investigation would be fruitful.

2.35 The institutionalized generation of time series data raises issues far wider than the research needs for such data. The Bank presently has official responsibility within the U.N. system for data on the debt of developing countries and it has moved to discharge this obligation conscientiously. The maintenance of such capacity is an expensive business; but, as far as we can judge, it is a precondition for providing good information to lenders, and ultimately, therefore, serves to widen access by developing countries to international loans. In considering any extension of such responsibilities to other fields, three questions arise: the Bank's needs for regularly updated data in particular areas; the Bank's comparative advantage in filling these needs by itself; and jurisdictional issues within the U.N. system.

2.36 On the question of Bank needs for data, a distinction should be drawn between the need for country-specific information using country concepts and definitions, and the need for internationally comparable data series. As the Bank itself has come to realize, these are two distinct needs. Country-specific data are useful in the conduct of country policy dialogue. Internationally comparable statistics are essential for both aggregate and cross-sectional analyses. Commentaries on world trends, assessment of development progress and documents such as the World Development Report make use of such cross-country data.

2.37 Despite these different needs, the basic sources for such data remain national statistical offices and country data systems. The Bank should endorse attempts to improve the capabilities of these offices, and to upgrade the quality of these systems. However, direct responsibility for such efforts

has to be assumed primarily by the countries themselves with the help of the U.N. Statistical Office. Expenditures by the Bank should be related mainly to specific data collection needed for its research or lending operations or to specific topics for which it feels a particularly urgent need. Any resources the Bank might allocate for the specific purpose of improving household survey capabilities in LDCs should not compete with its research program.

2.38 A major area where there may be a role for the Bank to play was identified by the Research Advisory Panel on Income Distribution and Employment, which recommended that considerably greater initiative and expenditure be devoted by the Bank to assure collection and dissemination of reliable, consistent and continuous data in the areas of income distribution and employment. We have examined this recommendation.

2.39 We are conscious that the panel's concern was not to collect and disseminate data on income per se, which in poor rural communities is difficult even to define, but rather to collect better information on living conditions. Household surveys provide the proper technique for such an investigation. But setting up suitable surveys, analyzing their results and using them for evaluating changes in welfare levels over time is a major operation which still raises problems, even in countries with developed statistical services. The Bank should not expect quick return from efforts in this area; in particular a long period will be required before any conclusive inference can be drawn from survey data as to the aggregate distributional impact of Bank lending.

2.40 A better knowledge of conditions of living within any country is, however, an important element in any assessment of its social and cultural development, and for this reason we feel that the Bank would be justified in promoting such knowledge. We recommend that this matter be studied by specialists in the area who would examine: (i) how a program in this area might be organized from a few pilot surveys to a more systematic effort aimed at producing international comparability, and (ii) in what ways the Bank might contribute to organizing and supporting such an undertaking.

2.41 There do not seem to us to be other major areas in which the Bank should assume the responsibility for coordinating routine international data collection. We do not in any case feel that the Bank has any particular comparative advantage in undertaking such work, nor that it should supplant existing arrangements within the U.N. system. Rather, in areas where it feels the current efforts to be deficient it should seek to operate through the responsible U.N. agency to improve matters.

2.42 Apart from its role as a producer of data, the Bank has become a major disseminator of cross-country data via documents such as the World Bank Atlas, the recent Atlas of the Child, or the 'World Development Indicators' appended to the World Development Report. These documents are widely used as standard reference sources by those interested in development. Such a role as propagator imposes responsibilities on the Bank for accuracy, consistency and comparability.

Chapter III

The Organization of Research Within the Bank

3.01 We deal in this chapter with issues internal to the Bank: the structure of its research establishment, the influence of this structure on the research program and the machinery for generating and approving research proposals. Our discussion is restricted to social science research financed either through the external research budget or from departmental budgets.

3.02 We begin with the present structure of the research community within the Bank. The Bank's staff of researchers is currently scattered across a wide variety of organizational units. Only one department, the Development Research Center (DRC) in the Development Policy Staff (DPS), is exclusively concerned with research. This unit of twenty professionals has accounted for roughly a quarter of Bank staff time devoted to research. The bulk of the research undertaken by the DRC is in the form of projects approved by the Research Committee. The major areas of concentration for the DRC have been sector planning models, economy-wide models, income distribution studies and effective protection studies. While the DRC has been a leader in these areas, such work has also been undertaken by other departments.

3.03 In contrast to the DRC, the remaining units engaged in research at the Bank are functionally specialized, and they also have responsibilities other than research. The Development Economics Department (DED) in the DPS and four departments in the Central Projects Staff (CPS) have a significant mandate for research. The Development Economics Department (which is the largest research producing department in the Bank) is divided into five functionally specialized divisions. In addition to research, these divisions have responsibility for policy work and they also support regional economic staff in their country and sector economic work. In the CPS the relevant departments have responsibility for functional review and support of projects, for sector work and for development of sectoral policy papers. What is of interest is not only the diversity of tasks mandated to the unit, but also the tasks assigned to the individuals who constitute the unit. Our impression is that CPS staff concerned with research typically undertake a somewhat wider range of activities than is the case in the DED.

3.04 Apart from these units in the CPS and the DPS, the Research Committee funding mechanism makes it possible for some operational units (such as country program departments) to undertake some research as well, supervised if not always executed by operational staff.

3.05 Expenditure on research as provided for in the administrative budget is of two sorts. First there are the funds allocated by the Research Committee. This is referred to as the "external research budget", and it is used to finance "external" expenditure (on consulting, travel, and data processing) on projects approved by the Research Committee (so-called RPO

projects). The size of the external research budget has remained frozen in real terms since 1973, at a level corresponding to roughly \$2.5 million in 1979 dollars. Research projects come before the Research Committee only if they need "external" finance in excess of \$10,000; if not, the expenditure is carried on departmental budgets, and the work is called departmental research (as distinct from RPO research.) Departmental research projects tend to be smaller projects, but they are numerous: about 60 out of the 140 research projects listed by the Bank in 1978.

3.06 The other budget item is the imputed cost of professional time spent on research. The cost of a professional manyear in research as calculated by the Bank includes an allocation of overhead costs, such as the cost of management and the prorata cost of support departments. About sixty-six professional manyears were devoted to research in FY78; this includes both the time of Bank staff and the time of consultants not financed from the external research budget. Half this total was directly spent on RPO projects, and the remaining half on departmental studies and other research related activities, including research preparation. In FY79 professional time devoted to research is estimated to have declined by fifteen percent as staff were diverted to operational and policy work; the reduction was wholly in non-RPO research and resulted in almost two-thirds of professional time being devoted to projects approved by the Research Committee. As Table 2 indicates, the total cost of research in FY78 was around \$10.3 million in FY79 dollars; the cost in FY79 is estimated to have declined to \$9.2 million. The share of RPO research has ranged from roughly two-thirds to three-quarters of this total.

Table 2: Resources Devoted to Research:
FY77-79
(in millions of FY79 dollars)

	RPO Research			Departmental Studies & Other ^{a/}			Total		
	FY77	FY78	FY79	FY77	FY78	FY79	FY77	FY78	FY79
"External" Expenditure	2.4	2.4	2.5	-	-	-	2.4	2.4	2.5
Manpower Costs	4.3	3.8	4.3	3.9	4.1	2.4	8.2	7.9	6.7
Total	6.7	6.2	6.8	3.9	4.1	2.4	10.6	10.3	9.2

a/ Including research preparation and other miscellaneous research related tasks.

The Research Community

3.07 This fragmented structure of research units, and the variety of other tasks undertaken by staff engaged in research must have some adverse effects on the efficiency with which they can conduct research. We have therefore considered whether it might not be better to concentrate all major research activity in two or three specialized units like the DRC.

3.08 A unified research community would have some advantages. First, its staff would be more highly specialized in research, having no operational responsibilities; its research capability would therefore on average be higher than that of units where operational skills rank equally with or higher than research skills. Second, it would probably make management of the research program easier. Third, concentrating researchers into two or three units would help to generate a stronger research culture with benefits in the form of better morale, mutual aid, cross-fertilization and achievement.

3.09 The disadvantage of consolidating all research into specialized units is that it would remove research still further from operations, reducing interactions between researchers and operational staff. Also, a large research department is likely to develop a life of its own, independent of the central concerns of the institution.

3.10 While it is difficult for us to enter deeply into organizational questions, it seems possible to suggest some criteria for improving the present organization. Among them would be the following:

- (i) The need for a minimum critical mass, which is now lacking in certain areas. This has been stressed by several of the specialized panels.
- (ii) The need to balance the requirement of continuity of research by individuals against operational involvement. The Bank currently seems to have a number of staff who devote too little time to research to be wholly effective as researchers.
- (iii) The need for a balance to be struck between the use of staff and of consultants on individual projects.

3.11 These criteria suggest firstly that, as much as possible, staff engaged in research should be grouped in units of a certain minimum size whose primary focus is research, even if the parent department has other responsibilities. Second, while it is desirable that some staff rotate between operational and research assignments to promote cross-fertilization, care must be taken to ensure that staff, when engaged in research rather than operational support, have adequate blocks of uninterrupted time for effective research. Third, while involvement in research implies corresponding time commitments on research collaboration, application and dissemination, care should be taken to allow time for genuine intellectual involvement by Bank researchers in the substance of the research; otherwise the Bank will be unable to retain its best research staff. Fourth, for the Bank to ensure that the research undertaken is responsive to its needs, as well as for better absorption by the Bank of research techniques and results, it is important that there be an adequate ratio of staff to consultants on individual projects.

Influence of Operations on Research

3.12 Our next concern is the relationship between research and operations in the formulation of the research program and in its overall management.

3.13 Currently the operational staff complain that the Bank's research program is not sufficiently geared to its operations. While much useful research runs ahead of operations, it is also true that the Bank's operations do reveal problems which could be the basis of relevant and interesting research. The question is to make sure that these problems get on the research agenda.

3.14 The answer is in part that the operational staff must have opportunities to affect the Bank's research program, and in part that they should have the chance to articulate their concerns through the generation of particular research projects.

3.15 As regards the development of research programs, there is need for additional machinery to bring research and operational staff closer together. We suggest that for major areas of research the Bank create 'Steering Groups', consisting in about equal numbers of suppliers and consumers of research in that area.

3.16 Such a Steering Group was established recently in the industry and trade area, with the participation of DPS, CPS, IFC and the Regional Offices. The Group has produced a draft report that makes proposals on research for the next several years, with additional recommendations on staff levels in research and in research applications. We would recommend the Steering Groups consult outsiders, particularly from developing countries, in the preparation of such programs.

3.17 The research programs of the Steering Groups, once established, would be reviewed by the Research Committee and the Steering Groups would also advise the committee on projects in their area. It might additionally be possible to grant the Steering Groups authority for approving research proposals that are part of an agreed-upon program and do not exceed pre-determined budgetary limits. The Steering Groups could review the progress of ongoing research within their areas of responsibility and participate in the evaluation of completed activities. This would enable the Research Committee to devote more time and effort to setting priorities among research areas and to consider general issues relating to Bank research, such as research application and dissemination.

3.18 To ensure coordination we recommend making the Research Advisor an ex-officio member of each of the Steering Groups. He would be responsible for coordinating programs in the various areas. The Research Advisor would also play a promotional role in research application and dissemination efforts, and in relationships with developing country institutions. He would need additional staff to discharge these duties adequately, and his position would need to be upgraded.

3.19 Whereas the Steering Groups would develop research programs in particular areas and advise the Research Committee on individual proposals, there remains the need for assistance to operational departments in translating their ideas into research projects. We propose below (para 4.06) that the office of the Regional Chief Economist be strengthened to permit better articulation of regional research interests. Assistance to this office (and to other operating units) should be provided by the Bank's research staff, given their familiarity with Bank operations. Assistance may take a variety of forms: development of joint projects, technical advice in the formulation of proposals, and generation of research based on ideas received from operational departments. Whenever appropriate, operating staff may also obtain the assistance of consultants in formulating proposals.

Other Social Scientists

3.20 One final issue relating to the organization of the research community within the Bank is the role of non-economists. As noted earlier, Bank research has been dominated by economics. However, with the Bank's more purposive attempts to encourage and support social change and to comment on such change, the Bank will need social scientists in other fields, particularly sociology and political science.

3.21 The number of such staff will probably grow even faster in the operational departments than in research, as the Bank expands its lending programs in such areas as rural development, population, education, health services or urban development. We doubt that it would be appropriate to create within the Bank a separate division for social scientists other than economists. Presumably they will be integrated into existing units in much the same way as economists and engineers now serve together. Our immediate concern is that the point of view of social scientists other than economists should be given consideration by the proposed Steering Groups.

Chapter IV

Research Applications, Dissemination and Training

Introduction

4.01 Thus far, we have dealt with the Bank's role in development research, and the organization of research within the Bank. In order for research to influence the Bank's larger program of country economic, sector and project analysis, it is important for the Bank to organize an effective application and dissemination effort internally. Since much Bank research is of direct interest to the developing countries, the Bank needs to have an effective dissemination effort externally as well. In turn, the effective absorption of research techniques and ideas carries implications for the Bank's training activities for its own staff and for officials in developing countries. We discuss these issues in this chapter.

Application of Research Within the Bank

4.02 As the research program has come of age, there are increasing demands for research applications from the operational departments. Such applications usually involve the use of innovative or more sophisticated techniques (whether developed in the Bank or elsewhere) to the problems encountered in country economic, sector or project work.

4.03 The external research budget does not presently provide for such research applications, and there are no explicit budgetary and staff allotments for this purpose in DPS and CPS or in the Regional Offices. The problem is therefore, one of promoting the application of new analytical techniques in the Bank. While it is not our purpose to make detailed recommendations on organizational questions, we wish to outline some possibilities.

4.04 In the first place, if researchers in the CPS and the DPS are to spend time on applications and dissemination, more staff must be made available for this purpose. The work involves different degrees of specialization. For example the construction of industrial programming or of agricultural sector models calls for highly specialized skills. It would be worthwhile to establish a special unit for assisting in work of this kind, using the services of say three persons who gave it all their time.

4.05 Apart from such highly specialized modelling, most of the work to be done by way of application and dissemination can be done by CPS and DPS professionals, if enough time is made available. We are told that the current pent-up demand for help with research applications from operational units would support up to six additional man-years, and we recommend that the CPS and DPS staff be increased by some such number for this purpose. We locate this staff in the CPS and DPS rather than in the Regional Offices for two

reasons. First because we intend that many more than six persons should be involved in applications and dissemination, thus making available a wider range of expertise than would result from giving each region an applications officer of its own. And second because we consider that in general applications should be a part-time function of persons who are also engaged in research, since this will help to maintain the quality and relevance of both research and applications.

4.06 At the same time we sense the need for a closer link between regional staff and research. The Steering Groups that we have recommended in Chapter III would contribute to this, but a focus of administrative responsibility is also needed in the regions. This could be provided by stressing that the Bank looks to the Chief Economist in each region to give leadership in the articulation of regional research needs and in the application of research results in country economic, project and sector work; and by providing him with additional staff for this purpose. For the immediate future we would suggest appointing one senior economist, with wide interests and some research experience, in the office of each Chief Economist, to concern himself primarily with the promotion of research and the application and dissemination of research results. This number could be increased as the work expands.

Dissemination and Training in the Bank

4.07 We have made repeated references to the importance of dissemination. While there are several existing channels for research dissemination, we feel that an increased dissemination effort is required to ensure that country, sector and project work at the Bank takes full account of research results, including important research developments occurring outside the Bank. At the same time, dissemination and training are intimately related since it is through exposure to research results and techniques and their absorption that the intellectual capital of operational staff can be maintained and upgraded.

4.08 One additional channel for the dissemination of research results is the preparation of brief reports on the findings of individual research projects. Such reports should include the results of 'field trials' or other examples of applications which show the relevance of the results for the operational and policy work of the Bank. Their preparation should be an integral part of the research project.

4.09 More generally, state-of-art papers should be prepared to review research areas that are of particular interest to operational staff. The reviews should survey research done both inside and outside the Bank and should focus on establishing generalizations that are relevant for the Bank's work, indicating how the research results and techniques may find operational applications. We understand that such a program of papers is about to commence, and we endorse this development.

4.10 Research reports and state-of-art papers are likely to remain unread in the absence of face-to-face communication between operational and research staff. Such communication could occur in seminars and workshops, for which research reports and state-of-arts papers become an input. Seminars may be organized on a particular subject on a regional, sectoral or Bank-wide basis, as appropriate.

4.11 Apart from seminars and workshops, there would be need for more informal individual contact between operational and research staff to discuss research-related problems arising from operations. All these avenues would sensitize operational staff to research ideas and results and would make research staff aware of operational issues. A further spur to assimilation of research by operating staff would be provided if researchers participated in reviewing the output of operational economists in their field. We would encourage the use of researchers' time for such review, and feel that in the long run this dialogue would create a more receptive climate for research amongst the operational staff.

4.12 Dissemination and training objectives would also be served by extending the rotation of Bank staff, expanding the scope of sabbaticals, and instituting advanced training programs. As regards the last, the Bank could develop courses for its own staff of the kind designed by the Economic Development Institute (EDI).

4.13 An increased dissemination and training effort would require modifying existing priorities in the Bank. For operational staff, this would mean setting aside time and resources for such activities on a regular basis. For research staff, participation in dissemination and training efforts, including informal contacts, should be made an integral part of their work program.

Research Application and Dissemination Outside the Bank

4.14 The standard vehicles for the dissemination of research results outside the Bank are the Staff Working Paper Series, Reprint Series, and the Bank's Research Publications. These are sent to a large number of research institutes in the developing countries, but far from all. We suggest extending the distribution of these documents to all research institutions of some standing in the developing countries as well as to institutions working on development problems in the developed countries. A wider distribution of the Bank's Catalog of Publications would further help the results of Bank research reach interested scholars in developing countries.

4.15 It is particularly desirable that research results reach the officials and consultants in LDCs who are designing projects into which the results could be incorporated. More frequent arrangements should be made for authors to visit such countries and hold seminars on their results as has already been done in a few cases. To the extent possible, research results should be introduced into courses at the EDI. The Bank's resident offices should also play a role in ensuring proper linkages with the local research community.

4.16 Finally in some cases where Bank research has produced new techniques that have aroused wide interest (such as programming methods in large scale industry, effective protection analysis, project evaluation techniques, or the use of social accounting matrices) the Bank may be asked by member countries to send staff to train local staff in the new technique. The research budget makes no provision for this; nor do departmental budgets. The particular staff members who have worked on the research project are not likely to be available for much work of this kind. In some cases it might be possible to use consultants conversant with the research in question. For this purpose, the Bank could pay the cost, not out of the research budget but as a part of its general budget.

Chapter V

Size and Priorities

5.01 In this chapter we address the question of how large the Bank's program for social science research should be, and of what areas of social science research should be given priority.

Size

5.02 We begin with the observation that the development process in most of its aspects is still insufficiently understood, and that social science research can help substantially to increase the world's knowledge about obstacles to development and how to overcome them. Considering the urgency of dealing more effectively with the stubborn problems of poverty, hunger, unemployment, and ill-health in the world's developing countries, we consider that more research aimed at these issues as well as at the development process in general is strongly warranted.

5.03 How much should the Bank do? There are other individuals and organizations that are able to contribute to the needed research. But at the same time, the Bank has the ability to select its own research objectives with flexibility, and the Bank is able to mobilize the best resources, wherever they may be found, to conduct the research it undertakes. There is thus a prima facie case for additional Bank-financed social science research on development: the need for such research is urgent and the Bank is well equipped to undertake it. Before reaching a firm conclusion, however, we have asked several further questions.

5.04 First is the test of performance: has the Bank's research been of high quality? This question was addressed by the Specialized Research Advisory Panels, on whose judgement we mainly rely. They were reviewing the results of over one hundred studies, so they found a mixture of good and bad. One can only ask how this mixture compares with results in other research institutions. The answer is that the quality of Bank research ranks as high as that of any other development research institution in the world. In a number of fields the Bank is the leader, and in all its work is highly respected.

5.05 Second is the test of utility: has the Bank's research been useful? In part, the answer is clear. The results of Bank research are plainly contributing to the Bank's analytical work, and that of member countries, in such fields as trade policy and sector analyses. There are also some good examples of the use of research results in project design: the Bank's projects in transportation and in public utilities would not be the same but for the results of Bank research. In some other sectors (education, population, small scale industry) however, research is still in the early stages and its results are only beginning to be seen. It remains true that the Bank's comparative advantage in project-related research has not been fully exploited, but we have proposed measures to remedy this.

5.06 Third is the test of feasibility: can the Bank manage well an increased amount of research? We have expressed some doubts about the current administrative arrangements, which produce too much fragmentation, but in our view these defects are easily remediable. The program is not in sight of becoming too large to manage. On the contrary, in some fields of study the number of Bank staff engaged in research may be below the critical minimum. We have also expressed concern that not enough attention is being given to disseminating research results both within the Bank and in developing countries. We do recommend that high priority be given to the measures for improving research application and dissemination outlined in Chapter IV, but we do not believe that the resources needed for this purpose preclude an increase in research activity.

5.07 In summary, then, we find the Bank's research record to be good in terms of quality and usefulness, and an increase in Bank research seems both desirable and feasible. By how much should Bank research be increased?

5.08 First note that we have already made some recommendations which are intended to be put into effect even if the program stays at its present size, and which have a substantial cost: (a) our recommendations for increased collaboration with LDC research institutions and for other ways of building LDC research capacity might cost \$750,000 a year in the first instance; (b) better management of the Bank's own data and retrieval systems might cost \$150,000; (c) additional staff for dissemination and application of research results within the Bank might come to 15 manyears (9 attached to the research departments, six in the regions) or \$1,800,000; (d) additional staff for dissemination and applications outside the Bank would require say three manyears or \$350,000; (e) travel and other expenses associated with (c) and (d) might add another \$500,000 to the external research budget. These figures add up to \$3,550,000 a year at today's prices. They are intended as orders of magnitude rather than as precise dollar amounts. But this should not obscure the importance we attach to them. In our view the additional functions that they will finance have a higher priority than an increase in the existing research program, since we consider that, having successfully completed a large number of projects, the Bank's next task is to make the arrangements to ensure utilization of results.

5.09 Fortunately it is not necessary to choose between spending more on application and dissemination and more on research because the total research budget is in any case such a small proportion of the income of the Bank. This budget has been held constant in real terms for the past six years or so, and should in our view now be expanded, because of the need to fill gaps in our knowledge of the development process, combined with proven capacity. Having in mind the need for orderly progress, we recommend a rate of expansion of up to ten percent a year in real terms, which cumulates to about 60 percent over 5 years. This ten percent applies to research funded through the Research Committee and departmental budgets (items (i) and (ii) in paragraph 1.05) and would therefore be about \$1,030,000 in the first year. Another review like the present one might be commissioned in about five years to make recommendations for the subsequent period.

5.10 Taken together the increases recommended in paras. 5.08 and 5.09 are quite sizable, and apart from their cost to the Bank we have also considered their effect on other development research organizations, which might find it more difficult to recruit professional staff. This should not be much of a problem for institutions in developed countries; as for the developing countries, the program will itself strengthen their research capacity if our recommendations in Chapter II are carried out.

Priorities

5.11 The question of priorities for the selection of research to be financed by the Bank is a difficult one. Precise allocations among types and fields of research, and the choice of particular projects, are matters which the panel considers can only be decided by the Bank, taking into account such factors as the availability of particular skills in the staff and the comparative quality of research proposals. We have three general comments on priorities, however, based on our review.

5.12 First, we have considered how well the Bank's research program accords with our view of the Bank's comparative advantages for conducting research which were outlined in paragraph 2.07. In general, we believe the research projects that have been selected for Bank support stand up well by these standards: they have made good use of the Bank's comparative advantages of scale, international scope, and ability to mobilize high quality talent. We have noted three qualifications which suggest directions for possible improvement:

- (i) The Bank's research has not drawn upon the Bank's own extensive experience with development projects as much as it might have.
- (ii) There are clearly areas of the Bank's interest--education is an example--in which a somewhat larger and more coherent research effort is needed to achieve a minimum critical size.
- (iii) While we endorse the importance of small projects and individual research in appropriate cases (the initial exploration of new areas, for example), we think some Bank research projects have not had sufficient scale and continuity to yield the results that were hoped for.

5.13 Second, we have looked at the fields of research chosen by the Bank and the relative emphasis given them. A convenient although imperfect indication of relative allocations is given in Table 3, which shows both the intended allocations among fields of research for the four years FY75 through FY78 and the actual allocations as they worked out over that period. These allocations are noteworthy for the substantial weight given to such newer fields of Bank emphasis as agriculture and rural development, urbanization, and income distribution, in comparison to such older fields as transportation, public utilities, and growth/comparative economic analysis. The panel considers these allocations desirable, and suggests that over the coming period still further shifts in emphasis may be warranted.

Table 3: External Expenditure FY75 to FY78, Compared to Guidelines
(Percentage of external expenditure, in constant dollars)

<u>Category</u>	<u>Guidelines 1/</u>	<u>Actual</u>
IA. Growth/Comparative Economic Analysis	11.0	13.4
IB. Income Distribution	14.0	11.4
II. International Finance and Trade	4.0	6.4
III. Agriculture and Rural Development	20.0	17.9
IV. Industry	10.0	6.5
V. Transportation	10.0	11.0
VI. Energy, Water and Telecommunications	5.0	8.1
VII. Urbanization	10.0	7.8
VIIIA. Education	5.0	4.6
VIIIB. Labor and Employment	5.0	7.5
VIIIC. Population, Nutrition, and Health	5.0	4.7
Other	<u>1.0</u>	<u>0.7</u>
	100.0	100.0

1/ Guidelines established by the Research Committee in 1975.

5.14 Third, we have reviewed the reports of the specialized panels, whose views of past research and of research priorities in their respective fields are summarized in the Appendix. These reports vary widely in the degree to which they make specific recommendations concerning research objectives and priorities within the fields they studied. They are all, in our view, conscientious and valuable reviews, and several of them make specific suggestions for reallocations of research resources which we commend for careful attention by the Bank. We note, however, that the priorities listed by these panels add up to a much larger program than the resources likely to be available, and we have been asked by the Bank to indicate our own preferences among these topics, as well as topics which have not been reviewed by specialized panels.

5.15 This we do with great reluctance. None of us is familiar with the state of research in the whole of this area. Moreover the choice of a topic depends to some extent on the persons who happen to be available, the data opportunities that may open up, and the changing urgency of issues. The making of a program is essentially a management task, and we would not wish any list of ours to inhibit this function, whether by pushing topics of which the Bank is doubtful or by excluding topics which it might otherwise favor. We have however been urged by the Bank to indicate our preferences, and this we now do.

5.16 Our list does not include topics where the current level of Bank research is adequate; it covers only topics where the research effort should be increased. It also excludes monetary and fiscal policy, which are studied by the Research department of the I.M.F.

1. Rural institutions. Relations between techniques and institutions; land tenure, marketing, credit, the labor market, the division of labor within the family.
2. Incentives in agriculture. Pricing policies, rural taxation, the flow of resources between town and country, the terms of trade between industry and agriculture.
3. Women in economic development. The changing economic roles of women. Absorption of women into the labor force.
4. Comparative costs in production of some major agricultural commodities and minerals. Differences in factor productivity and in the elasticity of supply.
5. Location of plants for processing primary products, as between developed and developing countries.
6. Technical education and the demand for labor. The match between demand and supply in the market for skills.
7. Energy policy in developing countries, with special reference to non-fossil sources of energy.

8. Water use and management; reduction of waste in both urban and rural uses.
9. Development policies and income distribution; changes in the relative positions of different socioeconomic groups; study of the consequences of different policy interventions pursued by countries to alleviate poverty or improve the distribution of income.
10. Labor markets, urban and rural migration. The structure of wages. Unemployment.
11. Low cost delivery systems for education, health and other public services.
12. Small scale industry, urban and rural. Evaluation of policies pursued in these areas since 1950.
13. Appropriate technology. The process of innovation and adaptation in developing countries; incentives for choosing appropriate technology.
14. The policies of public enterprises. Price policy; externalities; profits; labor policy; relationship to wider socioeconomic objectives.
15. Industrial entrepreneurship. Sources of indigenous entrepreneurship; policies designed to promote such enterprise.
16. Changing structure of world trade. Policy implications; inter-LDC trade; access to MDC markets.
17. Development and human fertility. Operational and evaluational study of family planning and related projects.
18. Development policies and nutrition; effects of different policy combinations on nutrition levels.
19. Coordination of various modes of transportation; cost comparisons, price policies; coordination of routes.
20. Geographical polarization of development; measures to spread development more widely and prevent excessive concentration in a few large cities.

5.17 Integration of these or other topics into the Bank's research programme would take some time, as existing research projects are completed, and as additional funds become available over the next five years. Over this period the Steering Committees whose creation we have recommended in Chapter III should be reviewing their fields from time to time and making judgments more closely linked to the immediate needs and opportunities of the Bank.

Appendix

Bank Research: Evaluation and Future Priorities

1. This appendix is based on the findings of the various panels (listed in para 1.02) which have reviewed Bank research in the following areas: Agriculture and Rural Development; Commodities; Education; Energy, Water, and Telecommunications; Income Distribution and Employment; Industrial Development and Trade; Population; and Transportation. Each panel has provided an evaluation of past research and has made recommendations on future research directions. Several of the panels have also indicated the implications of the recommendations for the size of the research program.

2. The Research Advisory Panel on Agriculture and Rural Development (RAPARD) concluded: "The overall impression which emerges from a review of research in the field of ARD [Agriculture and Rural Development] in the Bank is that of a large output of high quality" (p. 5) and that it "has quite likely contributed to the shift in lending policy toward the small farmer and the rural poor" (p. 6). At the same time, RAPARD criticized the lack of a "comprehensive research program" (ibid.) and noted that "the direct impact of ARD research on agricultural lending has been marginal" (p. 21).

3. RAPARD recommended that "the Bank's research support for ARD studies should be expanded considerably—roughly in proportion to the increase in Bank lending for the ARD sector" (p. 21). It further listed a number of new and expanded areas of research, classified under five major headings (pp. 23-24):

- (i) Nature and magnitude of emerging tasks: links between demography and ARD; water and energy balance; new production techniques.
- (ii) Options in key areas: relationships between techniques and institutions; risk, uncertainty, and finance; food and nutrition; factor shares.
- (iii) Making the lending program more effective: taxes, subsidies, and other incentives; rural infrastructure; 'software' aspects of projects; learning from prior lending projects; strategies for reaching the rural poor.
- (iv) Methodology for projects.
- (v) The process of change: intersectoral models; rural industries, insertion of traditional farmers in the market economy; public utilities.

4. The Advisory Panel on Commodities reviewed Bank operational work on commodities, including commodity forecasts, commodity studies, and papers on lending policy, as well as the few research projects the Bank has financed in the commodities area. The Panel concluded that "the forecasting methods used compare favorably with those in use for comparable purposes in other organizations" (p. 2) adding that "continuous improvement of the commodity forecasting should be based more on acquiring a deeper understanding of markets and their functioning than on further sophistication and formal modelling" (ibid.).

5. In turn, "the commodity research conducted under Research Committee auspices, though highly professional and sophisticated, has not yet made any significant contribution to the operational and the policy roles of the Bank, and the direction of the work still underway is hardly more promising in this respect" (p. 3). The Panel recommended undertaking four research projects:

- (i) The linking of cyclical and trend elements in forecasting the behavior of commodity markets.
- (ii) The treatment of inflation in price forecasting.
- (iii) The study of comparative costs and productivity in production of selected agricultural and mineral commodities, starting from available Bank information and research projects, with a view to feeding into Bank commodity policy and international commodity policy.
- (iv) The study of factors affecting the location of processing of selected agricultural and mineral commodities, with view to orienting Bank and international development policies.

"It is estimated that the above research projects, which should be monitored by the proposed Bank commodity steering group, would require one additional staff research coordinator in the Commodities Division, plus some \$70,000 of external funds per year for five years" (p. 5).

6. The External Advisory Panel on Education noted that "much of the research done is of high quality and quite useful, but for an organization committing several hundred million dollars a year to the expansion and improvement of education and training, the scale is clearly inadequate" (p. 28). The Panel proposed "a steady increase over several years in the scale of Bank-supported research on education and training, and the development of a stronger research strategy" (p. 29). The Panel suggested that research "should be aimed directly at important issues faced by the Bank and borrowers in pursuing major educational and training objectives, and it should reflect the comparative advantage of the Bank in doing research: for example, cases in which the Bank can conduct comparative study of activities in several countries, or cases in which the Bank has access to data not generally available" (p. 29).

7. The Research Review Panel on Energy, Water and Telecommunications (EWT) stated that its "overall view about EWT research is a favorable one" (p. 6); it commended the researchers for their "ability to focus on the aspects most relevant for Bank purposes" (ibid.); and it further noted that "a number of examples testify to the infiltration of economic analysis into Bank lending to public utility organizations" (ibid.). The EWT panel proposed a wide-ranging program, including the following subjects, some of which involve practical applications (pp. 9-10):

- (i) Energy--general: LDC energy outlook, energy and development; energy demand management and conservation; non-conventional energy.
- (ii) Energy--oil and gas: natural gas issues; inter-fuel substitution.
- (iii) Energy--electric power: standards of rural electrification; power pricing seminars; power energy pricing; autogeneration, cogeneration, technology monitoring, methods of power supply to remote areas; energy transmission costs.
- (iv) Water supply and sewerage: technology dissemination; follow-up research on technology; resource recovery; multi-city and multi-purpose projects.
- (v) Telecommunications: nature and characteristics of telephone usage; pricing policy.
- (vi) Multisector studies: alternative financing of infrastructure; asset revaluation; appropriate institutions for decentralized services.

8. For purposes of carrying out the research program, the panel suggested an immediate increase in staff from 2.5 manyears to 6.5 manyears and of consultants from 6.5 to 9.5 manyears. This increase is supported by the statement, "we feel that the research activities of the department have been understaffed in the past, its previous record shows that it is very capable of turning out very worthwhile research, and that there is a whole string of important projects awaiting investigation in the near future" (p. 16). The recommendations also aim at increasing the staff-consultant ratio in EWT research (p. 15).

9. The Research Advisory Panel on Income Distribution and Employment (RAPIDE) noted that the "Bank program of research upon income distribution emerged in a self-conscious, planned fashion and the Bank has been prominent in stimulating and pursuing research on income distribution." (Appendix B, p. 1). It further concluded: "this review makes apparent both the high quality and varied character of Bank income distribution research. It has been technically proficient and directed to a wide range of problems..."

The productivity of Bank staff compared with academic environments in which research is a large and regular component of responsibility is quite high [and] the deficiencies of the research have related less to its execution than to the erosion of policy orientation and focus as it has been conducted" (Appendix B, p. 8). Finally, "the initial Bellagio conference and subsequent publication of Redistribution with Growth has meant a leadership role that has not been characteristic of all fields of Bank research" (Appendix B, p. 1). RAPIDE identified "four priorities for future income distribution research. These include research upon the characteristics of socio-economic groups; study of the consequences of different policy interventions pursued by countries to alleviate poverty or improve the distribution of income; specific analysis of the effectiveness and implications of a basic needs approach to the problem of inequality; and comparative case studies of the relationship between national strategies of development and evolution of the distribution of income" (Main Report, p. 12).

10. In regard to research on employment, RAPIDE noted that "an evident feature is the generally high quality of the output ... and many of the authors have been acknowledged as experts in the field ... On the other hand, the relationship between the subject matter of research and the operational needs of the Bank has not always been evident" (Appendix C, p. 1).

11. The panel's priorities for research on employment are stated as being closely related to its priorities for income distribution research. "They may be grouped under three categories: careful study of developing country labor markets; analysis of the characteristics of the unemployed; and research on direct and indirect employment creation resulting from different kinds of projects. These generally conform to the emphasis of the Employment and Rural Development Division" (Main Report, pp. 14-15).

12. RAPIDE did not explicitly deal with the question of the size of the research program in income distribution and employment. As regards research on employment, it suggested the need "better to concentrate the efforts of the small number of staff in the [Employment and Rural Development] Division, and better to coordinate the research underway in other divisions" (p. 17). However, its recommendations on research in income distribution may be assumed to imply an increase in staff. Finally, RAPIDE proposed undertaking a large-scale data collection effort in income distribution and employment that cannot but be rather costly.

13. The report of the Research Advisory Panel on Industrial Development and Trade stated: "by and large, we are impressed by the overall high quality of Bank research on industry and trade in economic development" (p. 24), adding that "it is our impression that a number of different strands of Bank research have influenced, directly and indirectly, Bank operations" (p. 26). The panel further noted "that there are certain lines of research at the Bank which in the past have been forceful and productive, but which now are running into diminishing returns" (p. 29) and suggested that, in most of them, an application and dissemination phase should follow. It further proposed new lines of inquiry, together with the extension of some recent

work. The Panel's recommendations concern topics related to the trade area, to internal policies and institutions, and to innovation, entrepreneurship, and technological change (pp. 22-26).

14. In the trade area, the Panel recommended the expansion of Bank research on export promotion policies and market access and on changing international trade patterns, with special focus on inter-LDC trade. It also recommended undertaking research on "industrial growth paths, trade patterns, and policies to support them for countries that are rich in natural resources, those which are just beginning their industrialization, and those which are extremely poor and have not yet started in developing manufacturing activities" (p. 32).

15. Furthermore, it was suggested that the Bank "shift the focus from the economic effects of tariff policies to more general consideration of how policies and institutions influence resource allocation and efficiency within a country" (p. 32), with particular attention given to the effects of government policies on labor and capital markets as well as to the effects of price controls and other interventions. In addition, the Panel proposed expanding research on small scale industry and public enterprises.

16. It is further stated in the report: "We recommend that the Bank explicitly and consciously do research on mechanisms of technological transfer, adaptation of technology to better fit local economic conditions, innovation in industry in less developed countries, and the policies and institutions that support and stimulate technological progressivity" (p. 33). Having listed a number of related topics, it is added that an "examination of a set of issues relating to entrepreneurship strikes the Panel as particularly important" (p. 34).

17. As regards the size of the research program, the report concluded: "even though we have suggested that some research areas now are mature for application, that others should perhaps be phased out ... and finally that other types of research should not be 'moved into' it is obvious that our suggestions would require a somewhat larger research budget in the field of industry and trade..... Against this background, it is not unreasonable to increase the number of scholars at the Bank in this field with at least a handful (approximately five), highly competent persons" (p. 35). This number presumably does not include the staff needed for research applications in the industry and trade area.

18. According to the External Advisory Panel on Population, "the Bank's research work has been good as far as it goes but it has not gone far enough. On the whole, it is solid work, but it has been small and fragmented. The Bank's research effort needs to be changed in both magnitude and context: more substantial and more focused" (p. 30). And, again, "the research support for population is disproportionately low—especially in comparison with the Bank's disbursements to the Consultative Group for International Agricultural Research averaging \$2.8 million annually [sic] in the past four years. If that sort of funding can be made available for that important

field, the Panel considers that the Bank should be able to do better by this important field" (ibid.). The Panel further recommended that "the Bank's research program should deal primarily with (i) population growth and socio-economic development; (ii) operational and evaluational study of family planning and related projects; (iii) policy possibilities beyond family planning; and (iv) demographic data systems in fertility trends and behavior, in collaboration with other agencies" (p. 31).

19. While noting that "the transport research program under review has few signs of actually being a 'program'" (p. 6), the Transport Research Review Panel concluded that "the hallmark of this research has been the bridging of the gap between theoretical models and what reality can supply in the form of empirically established relationships" (pp. 6-9). Furthermore, "the overall accomplishment has indeed been impressive, clearly placing the Bank and its collaborators in a preeminent position among the world's leading research centers on problems of transportation in developing countries" (p. 7).

20. As to the future, the Panel suggested that, in the case of research projects undertaken so far, the "emphasis should clearly shift from the research activity proper to wider application and dissemination of results" (p. 7). As regards new directions, the Panel suggested the following areas of research and research applications (p. 30):

- (i) Highways: highway safety problems; road user charges; bus/trucking regulation/organization; miscellaneous technical guidelines.
- (ii) Construction industry: study selected countries; review paper: construction and industrial development.
- (iii) Ports and shipping: ocean shipping potential; port management problems; ports and regional development; coastal shipping potential.
- (iv) Railways: comparative costs of rail/other modes; practice in service reductions/closures; electrification vs. dieselization; equipment maintenance/utilization; railway information systems; miscellaneous technical topics.
- (v) Roads: Yemen Arab Republic feeder roads: Phase II; Ethiopia feeder roads: Phase II; rural transport needs; domestic regional aviation.
- (vi) Multi-modal and other: process of deregulation; spatial implications of transport projects; social transfers by transport pricing; freight transport chain; risk analysis updating.
- (vii) Contribution to rural infrastructure research program.

21. The Panel added that, "the recommended program of transport research implies an increase over three years of three Bank staff (from the current approximate seven man-years per year) plus one or two additional transport staff in support of the proposed broader study on socio-economic impact of rural development projects" (p. 32). This increase in staff time, and the proposed increase of consultant time by one-half (p. 30), includes work on research applications as well.

Annex I: Membership of Specialized Advisory Panels
and List of Panel Reports

(a) Panel Members 1/

1. Research Advisory Panel on Agriculture and Rural Development:

Vijay Shankar Vyas, Chairman	Director Indian Institute of Management Vastrapur, Ahmedabad, India
James Boles	University of California Berkeley, California, U.S.A.
Jean Marc Boussard	Chargé de Recherches Institut National de la Recherche Agronomique Paris, France
Gelia T. Castillo	Professor of Rural Sociology University of Philippines Los Baños, Philippines
Lucio G. Reca	Buenos Aires, Argentina

2. Advisory Panel on Commodities:

Ali Ahmad Attiga	Secretary General Organization of Arab Petroleum Exporting Countries Kuwait
Alan Brown	University of Oxford England
Eric M. Ojala	Senior Research Fellow Massey University Palmerston North New Zealand
Affonso Celso Pastore	Minister of Finance State of São Paulo, Brazil

1/ Affiliation at time of panel membership.

3. Advisory Panel on Education:

David E. Bell, Chairman

Executive Vice President
The Ford Foundation
New York, N.Y., U.S.A.

Mary Jean Bowman

Professor Emeritus
University of Chicago
Chicago, Illinois, U.S.A.

Paulo José Dutra de Castro

General Director of
Industrial Relations
Volkswagen do Brazil

Louis Emmerij

Rector
Institute of Social Studies
The Hague, Netherlands

Lameck K.H. Goma

Minister of Education
Republic of Zambia

Sippanondha Ketudat

Secretary General
National Education Commission
Thailand

G. L. Monekosso

Director
University Center for
Health Sciences
University of Yaoundé
Cameroon

D. P. Singh

Vice-Chancellor
Rajendra Agricultural University
Bihar, India

4. Research Review Panel on Energy, Water and Telecommunications:

M. Boiteux, Chairman

President
Electricité de France

Rómulo Furtado

Secretary General
Ministry of Communications
Brazil

Lambert Konan

Director General
Energia Electrique de la
Côte d'Ivoire, Ivory Coast

A. R. Prest

Professor of Economics
London School of Economics
England

A. K. Roy

Sanitary Engineer
World Health Organization
New Delhi, India

5. Research Advisory Panel on Income Distribution and Employment:

Albert Fishlow, Chairman	Professor of Economics and Director of the Concilium on International and Area Studies Yale University New Haven, Connecticut, U.S.A.
Simon Kuznets	Professor Emeritus of Economics Harvard University Cambridge, Massachusetts, U.S.A.
W. Arthur Lewis	Professor of Political Economy Princeton University Princeton, New Jersey, U.S.A.
Justinian Rweyemamu	Personal Economic Advisor to President Nyerere, Tanzania (on leave to the Independent Commission on International Development)
Gerardo Sicat	Director-General of the National Economic Development Authority Philippines
Leopoldo Solís	Sub-Director General Bank of Mexico

6. Research Advisory Panel on Industrial Development and Trade:

Assar Lindbeck, Chairman	Professor of International Economics University of Stockholm, Sweden
Edmar L. Bacha	Professor of Economics Pontificia Universidade Católica Rio de Janeiro, Brazil
Gerardo M. Bueno	Mexican Ambassador to the EEC Brussels, Belgium
Juergen B. Donges	Professor of Economics The Kiel Institute of World Economics, Kiel, Federal Republic of Germany
Jae-Ik Kim	Director-General Bureau of Economic Planning Seoul, Republic of Korea

(Continued)

- | | |
|--|---|
| Richard B. Nelson | Professor of Economics
Yale University
New Haven, Connecticut, U.S.A. |
| Kirit Parikh | Professor of Economics
Indian Statistical Institute
New Delhi, India |
| 7. <u>Advisory Panel on Population:</u> | |
| Bernard Berelson, Chairman | President Emeritus and
Senior Fellow
The Population Council
New York, New York, U.S.A. |
| Ronald Freeman | Professor of Sociology
Population Studies Center
University of Michigan
Ann Arbor, Michigan, U.S.A. |
| Goran Ohlin | Professor of Economics
University of Uppsala, Sweden |
| Frederick T. Sai | Assistant Secretary-General
International Planned
Parenthood Federation
London, England |
| Chandra Sekhar | Secretary
Ministry of Health and
Family Planning
Government of India |
| 8. <u>Transport Research Review Panel:</u> | |
| Jorge Cauas, Chairman | Former Chilean Ambassador to
the United States; also former
Minister of Finance and
Governor of the Central Bank.
Previously Director of the
Economic Institute at the
Catholic University of Chile |
| Dag Björnland | Director of the Institute of
Transport Economics, Oslo, Norway |
| Rodolfo Félix-Valdez | Sub-Secretary of the
Ministry of Human Settlements
and Public Works, Mexico |

(Continued)

Goon Kok Loon

Secretary of Administration of
the Port of Singapore Authority

S. Jagannathan

Former Financial Commissioner
of the Indian Railways; also
former Secretary, Ministry of
Finance (Department of Economic
Affairs); former Executive
Director of the World Bank and
Governor of the Reserve Bank of
India

Daniel L'Huillier

Professor of Economics and
Director of the Center for
Transport Economics Research at
the University of Aix-en-Provence

(Continued)

(b) List of Panel Reports

1. Report of the Research Advisory Panel on Agriculture and Rural Development, May 1979
2. Report of the Advisory Panel on Education, October 31, 1978
3. Report of the Advisory Panel on Commodities, May 1979
4. Report of the Research Review Panel on Energy, Water and Telecommunications, May 10, 1979
5. Report of the Research Advisory Panel on Income Distribution and Employment, May 1978
6. Report of the Research Advisory Panel on Industrial Development and Trade, May 1, 1979
7. Report of the Advisory Panel on Population, August 1976
8. Report of the Transport Research Review Panel, April 1979

Panel
Information

OFFICE MEMORANDUM

TO: Members of the General Research
Advisory Panel

FROM: Suman Bery, Secretary *SKB*

SUBJECT: Arrangements for Meetings, June 6-8

DATE: June 5, 1979

1. Members of the panel have the following offices assigned to them for their use during their visit to the Bank:

Sir A. Lewis	-	K3604	-	ext. 60018
Mr. O. Aboyade	-	K4002	-	ext. 61003
Mr. D. Bell	-	K4607	-	ext. 61282
Mr. H. Giersch	-	K4401	-	ext. 61262
Mr. N. Islam	-	K4003	-	ext. 61004
Mr. E. Malinvaud	-	K3324	-	ext. 60007
Mr. C. Massad	-	K3706	-	ext. 60025

Mr. Kim Mahn Je is unable to attend this session. All of the offices are in the 'K' Building of the Bank used by the panel last time, at 1850 K Street, N.W.

2. The panel is scheduled to hold working sessions from 9:00 a.m. to 6:00 p.m. on each of the three days as per the attached program. All meetings with Bank staff as well as the internal meetings of the panel will be held in Room K-3700.

3. As per our present information, panel members will be staying in the following hotels:

Mr. Aboyade	-	Washington Hilton
Mr. Giersch	-	" "
Mr. Islam	-	" "
Mr. Malinvaud	-	" "
Mr. Massad	-	" "
Mr. Bell	-	River Inn
Sir Arthur	-	Guest Quarters

4. Panel members are requested to proceed to their 'K' Building offices on their own on Wednesday morning, where Mr. Balassa and I will meet them. Mr. Balassa's office is K3411, ext. 61998. My office is K3501, ext. 60012. Miss Barbara Frazier, my secretary, will be available to assist the panel with travel and other arrangements.

SKBery:bf

General Research Advisory Panel

Schedule of Meetings: June 6-8, 1979 ^{1/}
Washington, D.C.

June 6

9:00 - 11:00 Reading Period

11:00 - 1:00 Meeting with Research Committee Steering Group. ^{2/}

Topic: "Research Priorities" (Chapter V)

1:00 - 2:15 Lunch: Host, Mr. Chenery
Panel members, Steering Group, Mr. Shankar
Acharya, (Research Advisor Designate)
Senior Vice President's Dining Room - E Building.

2:30 - 4:00 Meeting with Steering Group.

Topic: "Research Applications and Dissemination"
(Chapter IV).

4:00 - 5:00 Meeting with Mr. Chenery and Mr. Baum, Vice President
Central Projects Staff.

Topic: "DPS and CPS Roles in Research" (Chapter III).

6:00 - 8:00 Cocktail Party for Mr. Attila Karosmanoglu,
Host Mr. Chenery - E Building Gallery.

^{1/} All meetings (other than the meeting with Mr. McNamara) will be held in Room K-3700. Messrs. Chenery and Balassa will participate in all meetings with Bank staff. Mr. Bery will attend all meetings of the Panel, and be responsible for providing secretariat services.

^{2/} Messrs. Bela Balassa (Acting Research Advisor), John Holsen (Chief Economist, Latin America and Caribbean Regional Office), Robert Picciotto (Director, Projects Department, South Asia Regional Office), Herman van der Tak (Director, Projects Advisory Staff, CPS) and Bevan Waide (Director-Designate, Development Policy).

June 7

9:00 - 10:00 Reading Period.

10:00 - 11:00 Meeting with Steering Group and Mr. L. de Azcarate.
Topic: "The Bank's Role in Institution Building in Developing Countries", (Chapter II).

11:00 - 1:00 Internal Meeting of Panel.

1:00 - 2:15 Lunch: Panel members, Bery
(E Building Dining Room 3)

2:30 - 5:30 Internal Meeting of Panel.

5:45 - 6:15 Meeting with Mr. McNamara. (In Mr. McNamara's office)

Evening Free

June 8

9:30 - 10:15 Internal Meeting of Panel.

10:15 - 10:30 Coffee Break

10:30 - 12:30 Internal Meeting of Panel.

1:00 - 2:15 Lunch: Panel Members, Bery
(E Building Dining Room 4)

2:30 - 4:00 Internal Meeting of Panel.

4:00 - 4:15 Coffee Break

4:15 - 5:30 Internal Meeting of Panel.

Discussion
Draft

Revised 5th Draft
May 25, 1979

Report of the
General Research Advisory Panel

Issues:
(i) "Opening up" the style of research.

GUIDE TO NOTATION

This draft has been designed to highlight changes made since the April 17th draft sent to the panel. Changes are indicated as follows:

- (i) Underlined text represents new language inserted since the previous draft. Where appropriate indication is provided in the margin of the reasons for the change.
- (ii) Asterisks indicate deletions from the previous text.
- (iii) Brackets indicate new proposals or alternative language offered by panel members, which would need to be discussed at the panel's next meeting. The source of the alternative language is indicated in the margin.

New paragraph numbers have been provided, but the correspondence with the numbering in the April 17th draft is relatively close.

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Chapter V	Size and Priorities Size Priorities
Appendix	Bank Research: Evaluation and Future Priorities

Chapter I

Introduction

✓ 1.01 Research has been an established part of the World Bank's economic work for over twenty years. In the latter half of the 1960's, Bank research activities began to expand in response to the diversification in Bank operations. In 1971, the Bank created a separate, centralized budget for research. At the same time a standing committee known as the Research Committee was established to formulate guidelines for Bank research and to administer the Bank's research budget. Four objectives for Bank research were enunciated in 1971. They are:

- (i) To support all aspects of the World Bank's operations including the assessment of development progress in member countries;
- (ii) To broaden understanding of the development process;
- (iii) To improve the Bank's capacity to give policy advice to its members;
- (iv) To assist in developing indigenous research capacity in member countries.

✓ 1.02 — While the Bank regularly reviews individual research projects as they are completed, since 1977 it has initiated more comprehensive reviews of its research activities in a number of

areas. Panels of outside experts have been invited to evaluate the Bank's research in the fields of agriculture and rural development; commodities; income distribution and employment; industrial development and trade; energy, water and telecommunications; and transportation. These panels have assessed the quality and relevance of past Bank research in their field, identified important areas for further research and provided their judgement on the special contribution that the Bank could make in such research. The Specialized Research Advisory Panels (SRAPs)^{1/} were also invited to comment on general issues connected with the Bank's research efforts, such as the organization of Bank research, relationships between producers and users of research within the Bank, and the Bank's relationships with research institutes in member countries. All of the SRAPs have included such remarks in their reports, and we have benefited greatly from these. In addition to the SRAPs, external advisory panels have examined the entire range of Bank activities in the areas of population and education. These panels have commented on Bank research activities in these fields, and we have read these observations with care. ~~2/~~

✓ 1.03 The Bank's intention in establishing the present General Research Advisory Panel was to seek judgements on

1/ The membership of these panels is provided in Annex _____.
~~2/~~ Reference to all these reports is provided in the Bibliography.

general issues concerning the Bank's research posture in the future. Our draft terms of reference defined the panel's task as follows:

"The primary objective of this review will be to assess the size of the overall research program and its character and balance. This should be done in the light of the Bank's operations in, and advisory services to its member countries, with consideration given to the role it should play in increasing worldwide understanding of the development process".

The panel was also asked to review the objectives presently enunciated for the program, to determine whether they needed reformulation or ordering in terms of priority.

1.04 The panel was invited to establish its own final terms of reference after its meetings with Bank staff. ~~We did not formally choose to do so.~~ Our deliberations have, ~~however,~~ been concerned with the following broad questions:

- (i) What are the Bank's own research needs and what are the principal research needs of the development community at large?
- (ii) What role and responsibility is appropriate for the Bank in the area of data generation, management and dissemination?
- (iii) What policies should guide the Bank in its

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relationships with other research institutions and other researchers? What responsibilities should the Bank assume toward the development of indigenous research capacity in member developing countries? How best should it sponsor such development given its own needs and abilities?

- (iv) What kinds of research is the Bank most suited to undertake?
- (v) What improvements are needed in the organization and execution of research by the Bank?
- (vi) How can the Bank better assimilate the fruits of its research in its operations? How can it better propagate these results to its other chosen audiences?
- (vii) What has been the past performance of the Bank's research, in terms of both its quality and its usefulness to Bank operations?
- (viii) What are important areas of research for the Bank to enter in the future, given its objectives, aptitudes and needs?
- (ix) What is the appropriate size for the Bank's research program?

We have been conscious of the intrinsic difficulty of answering many of the questions listed above, especially for a group of outsiders not very familiar with the internal workings of the Bank.

1.05 The Panel has had some difficulty obtaining a complete picture of the Bank's contributions to research on development. This is in part because the Bank's activities are naturally diverse; the Bank is involved through its projects, its policy advice, and otherwise, in seeking to apply what is known and what is being learned about the entire complex, sprawling subject called "development." Our difficulty also stems in part, in our opinion, from the fact that the Bank has become increasingly involved in research over the past decade in a variety of ways and from several different sources of initiative, without bringing the whole picture together in any publication or organizational unit. At present, we find the Bank's contribution to research breaks into at least five parts:

(i) Research funded in part from a central research budget (known as the "External Research Budget") and allocated through the Research Committee, amounting in Fiscal Year 1978 (including the value of staff time) to about \$6.2 million (in FY79 dollars).

(ii) Research financed from departmental budgets and not subject to centralized review, amounting in FY 1978 to about \$4.1 million (also in FY79 dollars).

~~See paras 3.05 and 3.06 and Table 2 below.~~ *Delete from*

Cf. Bell, Annex 1 (paras 1.05 to 1.08)

Figures updated

Figures updated

(iii) The Bank's contribution to international collaborative research in agriculture (the Consultative Group for International Agricultural Research (CGIAR)) amounting in calendar year 1978 to about \$8.7 million, and the involvement by the Bank in the Tropical Diseases Program for which it currently acts as a secretariat.

(iv) Research financed by member countries under loans and credits from the Bank, for which accurate data have not been assembled, but ^{for which} a responsible estimate suggests may in recent years have amounted to \$30-40 million per year.

(v) The Bank's contribution to building up research capacity in developing countries, both through loans and credits for that purpose, (perhaps million in FY 1978, most of it for agricultural research capacity), and ~~(here the figures overlap with items i and ii above) through collaborative research activities between the Bank and research institutions in developing countries (about million in FY 1978).~~

Figures updated; facts corrected

Divide

Value of contracts.

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✓ 1.06 Several comments should be made about these categories. First, the Bank as an operating organization is primarily concerned with applied research, both in its own staff work and by its member countries. As in any such situation, the line between research and its application is inevitably uncertain. For example, the preceding paragraph does not account for some of the work undertaken in the Bank's regular program of economic and sector analysis, which could as well be called applied research. We are not troubled by this lack of precision in accounting, and have not tried to pursue unduly fine distinctions.

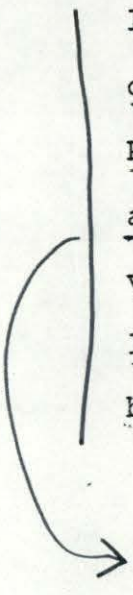
✓ 1.07 ^{Cancel} ~~Second, while the Bank has funded both technological research and socio-economic research, most members of this Panel have felt competent to offer advice only in the latter field. We have accordingly limited our deliberations to the Bank's activities in the area of social science research, particularly research in economics. We believe technological research is important, and we believe particularly that technological and socio-economic research often can be mutually reinforcing in very important ways--as they are, for example, in the international agricultural research centers. Accordingly, we consider that our report is incomplete as a basis for decision by the Bank's management on Bank research activities, and suggest that a further panel (or panels), focussing more on the technological side, might be helpful.~~ ^{This report is limited} ~~Cancel~~

We are aware of the Bank's intention to

reconsider its position in the field of technical research.

1.08 Third, the deliberations of our Panel have been conducted exclusively in Washington. The membership of the Panel has included persons with extensive experience of research and its applications in developing countries, but we have not visited such countries in the course of our work, and therefore lack information on how the Bank's research activities are seen by government officials and research leaders in member countries,

Accordingly, we suggest that



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Bell to draft add. language on use of Bank paper

further panel (or panels) for discussing discussion on the tech. side might be helpful

6/7/79

1.08 Third, the deliberations of our panel have been conducted in Washington, where we have had the opportunity to obtain the views and assistance of Bank staff. In addition, individual members of the panel have consulted with the chairmen of the specialized panels. ~~Our panel did not undertake to gather the views of member governments or of other international organizations on the~~ research work of the bank.

While we have made a number of suggestions about ways to make the Bank's research results more useful to member countries, and about ways in which the Bank can contribute more to enlarging research capacity in member countries, we are conscious of the limited basis of information on which we have based these suggestions.

~~[We believe that these are areas which should be pursued further in appropriate ways.]~~

✓ 1.09 The organization of the report is as follows. Chapter II discusses what kinds of research the Bank should finance and the nature of its collaboration with other research institutions. Chapter III examines the organization of research within the Bank. Chapter IV is concerned with the dissemination and absorption of the results of the Bank's research. Chapter V assesses the appropriate scale of the research programme, research priorities for the future, and balance between major sectors. Appendix A summarizes the principal conclusions and recommendations from the reports of the eight specialized panels.

Editorial

Chapter II

The Bank's Role in Research

2.01 The Bank plays a variety of roles in development research. Over the last decade it has emerged as a major producer of such research and is now a significant part of the world-wide community of researchers on development issues. ~~In addition~~ ^Tthe Bank is also a major consumer of research results, whether generated by its own research activity, or by the work of other persons and institutions. ^{* Add last ~~previous~~ sentence here} The objectives of the Bank's research program, the criteria for choice of topics, and the method of execution should reflect this diversity of interests. In this chapter we articulate some general principles that might assist in defining research strategy for the future, taking due account of research capability elsewhere, and the abilities and needs of the Bank. As noted already (para 1.07) we discuss here only the Bank's role in social science research.

* Cf. Bell, para 2. ^{Some} ~~To a small extent the Bank is, and to a much larger extent it could be, a significant~~ ^a contributor to building up research capacity in developing countries[?].

2.02 We begin with a discussion of the Bank's needs for research and the criteria that should guide the Bank's choice of research areas. We then sketch the appropriate relationship between the Bank and the other major participants in development research: research institutions and scholars in both developing and developed countries, and in other international

organizations. We conclude with a discussion of the Bank's role in the area of data collection. We have chosen to examine this issue both because data are a prerequisite for research, and because the role of the Bank in the data area has been raised by some of the specialized panels.

Objectives *and Criteria*

- ✓ 2.03 Since the Bank has become one of the largest sources of research on economic development, its research objectives must be stated in relation to the policy needs of its member countries as well as its own analytical requirements. While focussing on its operational needs, the Bank should not neglect the contribution to the understanding of the development process that its central position makes it particularly qualified to undertake. In this context we endorse the four objectives of Bank research stated in paragraph 1.01. In the remainder of this chapter we suggest ways in which the Bank may be able to achieve a better balance among these objectives.

~~The Bank's Needs for Research~~

- Editorial 2.04 At the most immediate level, the Bank's ~~need~~ for social science research can be considered under two heads: research whose results are likely to influence the design of projects for which the Bank lends, and research which is of importance for the Bank's more general policy functions. These functions include the Bank's role as an advisor to developing countries, and the development of the Bank's own policies. ~~Such policy activities require the Bank to analyze the economic situation of its members, and to chart the course of world economic development.*~~

Cf. Bell,
para 3;
Aklilu,
para 3(a)

2.04 At the most immediate level the Bank's own use of social science research can be considered under two heads: research whose results are likely to influence the design of projects for which the Bank lends, and research which is of importance for the Bank's more general policy functions. These functions include the Bank's role as an advisor to developing countries and the development of the Bank's own policies.

✓ 2.05 These lending and policy activities require the Bank to use the results of a wide range of analytic techniques. The Bank's larger role as a ^{leading} ~~premier~~ development institution requires it to keep abreast of current thinking on development processes, and to use the results of both theoretical and empirical research, ~~and to advance the debate~~

The Bank should not be content with the state of the art as it finds it but has an obligation to advance the debate on the objective and instruments of development.

Redraft. Objections "aspire to leadership"

✓ 2.05 These lending and policy activities in themselves require the Bank to use a wide range of ^{analytic} ~~economic~~ techniques, and to remain abreast of current thinking on development processes and policy.

Leadership "state of art"

The Bank, though, cannot, and in our opinion should not, be content with the state of the art as it finds it. Implicit in the leadership function to which it aspires is an obligation to advance the debate on the objectives, and instruments of development. In order to perform this role it needs ~~access to~~ ^{to make use of} research of the most basic kind.

The results of theoretical as well as empirical work.

✓ 2.06 To say that the Bank has these varied research needs is not to say that it should attempt to meet all of its needs through its own staff, nor that it should necessarily finance the entire spectrum of research. Nonetheless we feel that a balanced research program for the Bank must necessarily continue to be a blend of project level research, applied country and international analysis and more fundamental analysis of the structure of developing countries and the development process.

2.07 There still remains a need to define more specifically the kinds of research the Bank should seek to undertake. Here we think the decisions should be guided by the special advantages that the Bank enjoys as a research organization, and by its particular needs.

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to
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para 3

Substitute for page 12 to end of para 2.07.

Text by WAL
to follow 2.07
currently on p. 11.

Approved:

As a general proposition the Bank should not embark upon topics which are already adequately covered by other institutions. It should on the contrary rely on exploiting its comparative advantages. ^{which are as follows:} We would suggest that the following ~~criteria be used by the Bank to decide which areas of research it should undertake:~~

- (a) The Bank should capitalize on the skills and information that it acquires through its activities as a lender and as an adviser. Particular attention should be given to making use of the Bank's project experience and the data generated in Bank projects. However, fruitful analysis of data presupposes an adequate conceptual framework, so we expect some part of the Bank's research program to be concerned with theory.
- (b) The Bank should excel in comparative studies, though its program should not be confined to work of this kind.
- (c) The Bank is exceptionally well placed to handle investigations involving several manyears of research time, and we would expect rather more than half of its research manpower to be engaged on projects of this kind. However many medium and small projects will also qualify, because of

the Bank's comparative advantage in data and
experience, coupled with their relevance to
the Bank's immediate needs. ~~Whatever the~~ WAL
~~size of the research project may be, whether~~
~~large, medium or small, the Bank should not~~
~~embark upon it unless it is willing to commit~~
at least the minimum critical mass of resources
that the project may require to see it through to
completion.

*In any case the Bank should not embark upon an
investigation unless it is willing to commit
at least the minimum critical mass of resources to see it
through.*

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language*

We would suggest that the following criteria be used by the Bank to decide which areas of research it should undertake:

- Bell: 0 para or 2*
- (a) The Bank should choose research subjects and areas in which the need for advances in knowledge of the development process are most urgent and opportunities for such advances seem promising.
- (b) The Bank should undertake research in areas where such research is likely to influence the Bank's project work, the Bank's operational policies, or the advice it gives to developing countries.
- (c) The Bank in its research should seek to exploit the skills and information that it acquires through its activities as a lender and as an advisor. In this connection, particular attention should be given to making use of the Bank's project experience and the data generated in Bank projects.
- (d) The Bank should give emphasis to comparative studies, for which it is well-equipped given the wide knowledge it has accumulated on developing countries.
- The bulk of Bank research*
- (e) By and large, Bank research should be focussed on particular themes or programs of research involving several researchers rather than individuals. Continuity of research effort should be stressed, and fragmentation avoided.
- Strike (e)*
- Show coherence of programs*

Bell,
para 4.

Attempts to clarify Bank's comparative advantage in research. Cf. Srinivasan, paras 2,3; Aklilu, para 3(b); Stoutjesdijk, para 1.

(f) The Bank should only undertake research in areas where it is willing to support a critical mass of qualified researchers; it should avoid fields where

C klilu, 3(c)
S...ivasan p.2

;Residual supplier it is unwilling to make such a commitment.
principle endorsed
below.

The above criteria represent the application of the principle of comparative advantage to Bank research. There may be cases where the Bank does not have a comparative advantage in a particular research area, but the research is necessary for Bank operations. In such instances, the principle of 'residual supplier' should come into play in undertaking research at the Bank.

✓ 2.08 Despite the advantage that the Bank ought to enjoy in project-related research, not much use has been made by the Bank of its project experience or project data for research purposes. This side of Bank research needs to be strengthened. In recent years the Bank has begun regular evaluations of completed lending projects and has increasingly built monitoring and evaluation components into the projects it finances. These should provide additional material and ideas for project oriented research.

Relations with other researchers:

Collaboration

Insert to be provided by Bell.
and Institutional Policy.

✓ 2.09 We next turn to the appropriate scale and form of the Bank's collaboration in its research activities with the other major participants in development research. In making these judgements we consider both the Bank's own needs and abilities and its goal of fostering research capacity in developing countries.

(2.09 - 2.23)

Draft paragraphs, p 13 ff

Relations with other research organizations

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2.09 As a major actor in the field of development research, the Bank has a responsibility to consider the impact of its activities and decisions on other organizations active in the field. We discuss in subsequent paragraphs the relationships of the Bank's research program to major groups: research institutions in developing countries, research institutions in advanced countries, and international institutions. Before taking up those relationships, we mention two more general points.

2.10 The first is that the Bank's method of approach to its research activities has been primarily ^{Self-contained:} ~~inward-looking~~; Bank staff have identified research objectives; prepared, executed, and supervised research projects; and interpreted and disseminated the results. Researchers outside the Bank have been involved, ~~if at all~~, as consultants employed to assist in Bank-defined work. The principal reason for this tightly controlled ~~and directed~~ research process has been the desire to establish research as a high-quality and useful activity in an organization mainly directed toward operational objectives.

2.11 There have plainly been benefits from this approach to research; it is our impression that research has been accepted

and is now solidly established as an appropriate part of the Bank's normal activities. But there have been costs as well. To the outside research community the Bank has appeared ^{Some what} self-contained, aloof, and ~~largely indifferent to~~ ^{has not ~~fully~~ appreciated the wide range of} opportunities for interchange and collaboration. While this impression may be exaggerated, we believe there would be much to gain if the Bank were to adopt a more ~~open and~~ collaborative research stance. We recommend that the Bank do so. In particular, we suggest that the Bank move toward other methods of collaborative research in addition to the hiring of outside consultants, toward greater involvement of outside researchers in the assessment and guidance of Bank research, and ~~toward supporting with Bank funds research proposals prepared outside the Bank.~~ None of these ideas ^{is} are new, and in a few instances the Bank has ~~begun to move~~ in these directions. We suggest continued and stronger movement, drawing on the advice of external experts.

2.12 . A second general comment we would offer on the Bank's relations with other research groups is that we believe the Bank can and should play a larger role in promoting stronger and more coherent research efforts by the research community interested in development. Research on development is conducted in many places around the world, by many individuals and groups. There can be great strength in this diversity, and we would not want to see any inhibition on the independence of researchers. But there is clearly need for initiative in arranging for periodic assessments of research progress in different fields; in

encouraging the rapid spread and adoption of new research methodologies; in identifying promising new areas for future research; in doing many other things which will contribute to informing researchers and supporting them in doing better research. The Bank is in a strong position to help with these objectives, as it has shown in some instances already, and we think it should do more along these lines. We are not, we emphasize, recommending that the Bank seek to lead or dominate the development research community - only that it play an appropriate part, along with many other organizations, in improving communications, assessments, and supporting arrangements among the world's researchers in the development field. We believe the increased openness by the Bank to external influences on its own research program, which we have earlier recommended, will put the Bank in a much better position to play a more constructive role in the larger research community.

Cf. Aklilu, 3(c)
S: ivasan p.2

(f) The Bank should only undertake research in areas ' where it is willing to support a critical mass of qualified researchers; it should avoid fields where

:Residual supplier it is unwilling to make such a commitment.
principle endorsed
below.

The above criteria represent the application of the principle of comparative advantage to Bank research. There may be cases where the Bank does not have a comparative advantage in a particular research area, but the research is necessary for Bank operations. In such instances, the principle of 'residual supplier' should come into play in undertaking research at the Bank.

2.08 Despite the advantage that the Bank ought to enjoy in project-related research, not much use has been made by the Bank of its project experience or project data for research purposes. This side of Bank research needs to be strengthened. In recent years the Bank has begun regular evaluations of completed lending projects and has increasingly built monitoring and evaluation components into the projects it finances. These should provide additional material and ideas for project oriented research.

Collaboration and Institution Building

2.09 We next turn to the appropriate scale and form of the Bank's collaboration in its research activities with the other major participants in development research and of the Bank's role in institution building. In making these judgements we consider both the Bank's own needs and abilities and its goal of ~~fo~~ostering research capacity in developing countries.

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can to develop.

(i) Researchers in Developing Countries

2.11

2.10 We begin with a discussion of the scope for involving researchers and research institutions from developing countries in Bank research. Thus far, the Bank's relationship with these scholars has been through collaboration on joint studies. There have been many such projects under the external research program, and the scope of association has been wide, ranging from assistance in data collection to subcontracting of complete studies. The Bank has avoided making block grants to socio-economic research institutions, or to individual scholars.

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2.11 We endorse the general idea of collaborative research as a major instrument of interaction between the Bank's research program and developing country researchers and recommend that the number of such collaborative projects be increased. We feel that research capacity in a growing number of developing countries is now sufficiently sophisticated to make a valuable contribution to the substance of Bank research. Moreover, important institution building objectives can be achieved as a by-product of research collaboration.

2.13

2.12 The scope for such partnership is presently diminished by a number of obstacles. First, the number of LDC research institutions adequately staffed for such research is still limited, and most of these have research priorities of their own which should be respected. The obstacles to increased collaboration are only partly financial, and insofar as they are financial they can be largely eliminated by the Bank contributing to the direct and the indirect costs of LDC institutions with which it is collaborating. A more fundamental obstacle

in some countries is the limited number of trained personnel, and the demands for their services from universities, government departments and the private sector. Elimination of this deficit will take time.

2.13 Another limitation is imposed by lack of data. There are substantial differences between countries in the quantity and quality of data that are available; understandably, research has tended to be concentrated on those countries where the data are better. In a number of cases the Bank has sought to overcome this problem by financing the collection of data as a part of the research. This practice should continue in the future as appears appropriate in specific research contexts.

2.14 There are undoubtedly certain costs associated with collaborative research. The structuring of collaborative agreements, the supervision of work plans, the monitoring of output and of quality are time consuming tasks. Collaboration with the weaker institutions may also involve higher risks of failure

2.15 While we recognize that collaboration involves additional managerial overhead (and, occasionally, diminished quality), we see such ^{Collaboration} involvement as beneficial to both parties. The Bank should be prepared, within reasonable limits, to make the additional investment in time and money needed to foster research collaboration.

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2.16 The Bank should moreover, deepen the involvement of developing country institutions in its research projects and should strengthen the institution building aspects of its collaborative efforts. Collaboration agreements should ^{also} provide time and budget allocations to cover the costs of bringing overseas researchers to Washington for limited periods. The technical expertise so gained would facilitate future application of innovative techniques in the country concerned. This would be particularly desirable in comparative projects, where ^{at present} the country participants often ~~do not get the full benefit~~ of the analysis. ^{are not involved in the later stages of}

2.17 It should be noted that the opportunities for collaborative analytic work with developing country researchers are not restricted to the external research program. There are often sizeable research components financed by borrowing countries under project loans and credits. While the disposition of these funds is governed by the loan agreement between the Bank and the borrower, the Bank could play a more active role in providing technical support.

2.18 Similar opportunities are presented by the Bank's country and sector work program, which is several times larger than what is defined as research. A number of studies now carried out in connection with country economic work on income distribution, employment, exports, migration, etc., would constitute suitable topics for collaborative studies with local institutions. There are already examples of such collaboration and its expansion is already under active discussion at the bank.

(Before Nov 2, 19)

2.22 We recommend two additional steps which we think will allow the Bank to combine its interest in high-quality research with its interest in strengthening research capacity in developing countries. The first is to join with other organizations in making research grants through regional organizations or arrangements which can ensure high quality selections of individuals and organizations. Several such arrangements have come into being in recent years through which funds may be distributed to researchers selected on a basis of comparative merit. From the viewpoint of the Bank (and other research funders) the advantage is that these arrangements can provide assurance of quality control, and the Bank does not have to contemplate the staffing and other costs that would otherwise be necessary to distribute research grants effectively. We would encourage the Bank to move cautiously but positively in the direction of making such research grants, in collaboration with other funders. Experience in the ~~United States and elsewhere~~ suggests that supporting researchers in what they wish to do, in areas that coincide with the general research objectives of a funding organization like the Bank, can be a highly efficient form of research support.

2.23 The second step we recommend, aimed both at producing high quality research and at strengthening research capacity in developing countries, is for the Bank to offer a number of post-

doctoral fellowships for research undertaken at the Bank. Each fellowship would be available for a limited period, (say, two years at a maximum), only to researchers who are firmly associated with ~~research~~ institutions in developing countries. The Bank would have to decide the number of such fellowships it could ~~conveniently offer~~ ^{have at any one time upto twelve persons} - perhaps half a dozen per year might ~~be feasible~~. Even relatively small numbers should make a significant difference over a few years in providing major stimulation to research activity in a number of developing country research centers.

In addition to the effect of

2.19 While the Bank's own research activities ^{in supporting} should not be charged with institution building per se, ^{the} our panel feels that the development of socio-economic research institutions in developing countries could be a priority field for Bank action. Research in such institutions could be as important to development as a successful agricultural and transportation project. So, the Bank should consider the feasibility of financing projects for building socio economic research institutions in the same way in which projects in other sectors--agriculture, industry and education, energy, transportation, etc. - are considered. Institution building requires sustained efforts at creating or strengthening an organization, training staff, at the pre and post doctoral levels, ^{providing} for library and data management facilities, ^{temporary secondment of B} establishing strong contacts with leading research institutions elsewhere, and promoting a general stimulating environment. These requirements could be better fulfilled within the context of self-contained projects covering a period of several years and financed with a proper balance of Bank loans and credits and grants. In special cases, this balance should be tilted in the direction of grants, taking into consideration the countries involved and the likely impact of the research institution to be developed. ^{* transfer} Regional research

institutions in developing countries merit special consideration, ^{at the same time} the establishment of new regional research institutions may be useful. ~~On additional direction of collaboration in Bank research staff~~

* Temporary secondment of Bank staff may be helpful in some cases.

2.20 The Bank may join regional cooperative institutions or foundations in developing countries in the joint financing of research, taking adequate steps to insure selectivity in terms of research quality. However, we do not feel that the Bank ought to embark in a policy of providing block grants to individuals or institutions outside the general context of research collaboration or self-contained institution building projects.

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2.21 We feel it important that the Bank take an integrated view of the research work being undertaken with Bank support in any given country under these various formats, something which does not adequately happen at present.

2.22 To summarize, our view is that the Bank's main relationship with developing country researchers should be through ^{we}collaborated research projects and self-contained institution building projects. The scale of collaboration should be expanded, and the involvement of collaborating institutions deepened. In addition, collaboration should be encouraged in contexts wider than the external research program. The Bank should take steps to strengthen the institution building aspects of such collaboration. However, we feel that institution building could be undertaken as a project in itself, and we encourage the Bank to consider the feasibility of financing institution building projects in the socio-economic--and ~~technology~~ research areas. On the other hand, we feel that

the Bank should not award block grants to outside researchers from developing (or for that matter, developed) countries except in the context of collaboration research or self-contained institution building projects.

(i) Researchers in Developing Countries

✓2.10 We begin with a discussion of the scope for involving researchers and research institutions from developing countries in Bank research. Thus far, the Bank's relationship with these scholars has been through collaboration on joint studies. There have been many such projects under the external research program, and the scope of association has been wide, ranging from assistance in data collection to subcontracting of complete studies. The Bank has avoided making block grants to socio-economic research institutions, or to individual scholars.

✓2.11 We endorse the general idea of collaborative research as the major instrument of Bank interaction ^{between the Bank's ^{own} research program &} with developing country researchers and recommend that the number of such collaborative projects be increased. We feel that research capacity in a growing number of developing countries is now sufficiently sophisticated to make a valuable contribution to the substance of Bank research. Moreover, important institution building objectives can be achieved through Bank participation. ^{also by product of collaboration}

✓2.12 The scope for such partnership is presently diminished by a number of obstacles. First, the number of LDC research institutions adequately staffed for such research is still limited, and most of these have research priorities of their own. ^{which should be respected.} The obstacles to increased collaboration are only partly financial, and insofar as they are financial they can be largely eliminated by the Bank contributing to the direct and the indirect costs of LDC institutions with which it is collaborating. A more fundamental obstacle

in some countries is the limited number of trained personnel, and the demands for their services from universities, government departments and the private sector. Elimination of this deficit will take time.

✓ 2.13 Another limitation is imposed by lack of data. There are substantial differences between countries in the quantity and quality of data that are available; understandably, research has tended to be concentrated on those countries where the data are better. In a number of cases the Bank has sought to overcome this problem by financing the collection of data as a part of the research. This practice should continue in the future as appears appropriate in specific research contexts.

Editorial
2.14 &
2.15:

Language altered by Secretary: ✓ 2.14 There are undoubtedly certain costs associated with collaborative research. The structuring of collaborative agreements, the supervision of work plans, the monitoring of output and of quality are time consuming tasks. Collaboration with the weaker institutions may also involve a ^{higher risks of failure.} lower quality final output.

cf. Akli-
lu 3(d);
Srinivasan p.2

✓ 2.15 While we recognize that collaboration involves additional managerial overhead (and, occasionally, diminished quality), we see such ^{collaboration} involvement as beneficial to both parties. The Bank should be prepared, within reasonable limits, to make the additional investment in time and money needed to foster research collaboration.

✓ 2.16 The Bank should moreover, deepen the involvement of developing country institutions in its research projects and should strengthen the institution building aspects of its collaborative efforts. Collaboration agreements should ^{also} provide time and budget allocations to cover the costs of bringing overseas researchers to Washington for limited periods. The technical expertise so gained would facilitate future application of innovative techniques in the country concerned. This would be particularly desirable in comparative projects, where ^{at present} the country participants often ^{are not involved in the later stages of} do not get the full benefit of the analysis.

2.17 A more organized program of research applications as suggested below (Chapter IV) would provide further opportunities for collaborative research with developing country institutions. Given the regional character of this work, it would also permit the establishment of regular contacts with the institutions in question and would ensure the geographical diversification of collaborative research.

2.18 These modes of collaboration pre-suppose the existence of research capacity in the country concerned. There are several countries where such capacity does not exist and institution building efforts independent of research collaboration would be necessary. This does not appear to be an appropriate task for the Bank, ^{Research Staff} to undertake ^{Lewis - delete} except where expansion of local research capacity is clearly a high priority activity, suitable for financing under project loans and credits.]

There are several other ways in which the Bank ^{Could} ~~can~~ appropriately support ^{the building of research} such institutions building efforts: *in hds...*

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by
Masad

Lewis

Bell,
para 5

*Distinction between Bank
and other kinds of Bank as
a research institution*

(i) financing the expansion of research capacity under project loans and credits (as the Bank now does in some cases such as agricultural research);

(ii) including research training in the scope of the EDI both in Washington and overseas; the type of research training that would be appropriate for the EDI would primarily be--as is the case with other EDI programs--short courses and workshops stressing applications of research methodologies to practical development problems;

(iii) establishing a number of post-doctoral research fellowships, available to persons who have completed academic training and worked for a period thereafter in their own countries, where the fellowship (for two years as a maximum) can be shown to be an appropriate part of a staff development process for a research institution in a country seriously lacking such capacity.]

✓ 2.19¹⁷ It should be noted that the opportunities for collaborative analytic work with developing country researchers are not restricted to the external research program. There are often sizeable research components financed by borrowing countries under project loans and credits. While the disposition of these funds is governed by the loan agreement between the Bank and the borrower, the Bank could play a more active role in providing technical and ^{Support.} ~~supervisory~~ guidance where the executing agency is a local institution.

2.17 → 2.21
may come before
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¹⁸
 2.20 Similar opportunities are presented by the Bank's country and sector work program, which is several times larger than what is defined as research. A number of studies now carried out in connection with country economic work on income distribution, employment, exports, migration, etc., would constitute suitable topics for collaborative studies with local institutions. *There are already examples of such collaboration and its expansion is* We understand that ~~this idea is already~~ under active discussion at the Bank.

2.19 ~~2.21~~ - *Now para by Nassad on instn. bids*
 ✓ 2.21 We feel it important that the Bank take an integrated view of the research work being undertaken *with Bank support* in any given country under these various formats, something which does not adequately happen at present. *2.21*

Bell to re-draft
 2.22 ^{2.20} Finally, the Bank could act like a foundation, making grants to individuals or institutions in developing countries for research of their own choosing. We do not recommend this since we think that for the time being the Bank's staff should be involved in choosing and participating in any socio-economic research that it is financing. However, the Bank may join regional cooperative institutions or foundations in developing countries in the joint financing of research. [This may be an effective method for the Bank to follow where there are adequate arrangements to ensure high quality selections of individuals and institutions. There are beginning to be regional cooperative arrangements in some parts of the world which are developing standards of quality control the Bank (and other research funders) can rely on. We would encourage the Bank to move cautiously but positively in the direction of making such research grants, in collaboration with other funders. Experience in the United States and elsewhere suggests that supporting researchers in what they want to do, in

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Nassad has new text.
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2.21

Bell, para 6

areas that coincide with the general research objectives of a funding organization like the Bank, can be the most effective form of research support.]

2.23 To summarize, our view is that the Bank's main relationship with developing country researchers should be through the medium of collaborative research projects. ^{Massed} The scale of such collaboration should be expanded, and the involvement of collaborating institutions deepened. In addition such collaboration should be encouraged in contexts wider than the external research program. The Bank should take steps to strengthen the institution building aspects of such collaboration. However, we do not think it appropriate for the Bank to undertake institution building outside the framework of collaborative research except by financing the expansion of high priority local research capacity through project loans and credits; nor do we feel that the Bank should act like a foundation, awarding block grants to outside researchers from developing (or for that matter, developed) countries. ~~[The Bank should take steps to strengthen the institution building aspects of such collaboration and undertake additional activities of an institution building character.]~~

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Bell,
para 7

To achieve the objectives will need money. For purposes of objectives mentioned 2.10 - 2.22 the Bank will need to provide ^{between} ~~about~~ \$1.0 million per year.

(ii) Researchers in Developed Countries

2.24 We turn next to the appropriate relationship between Bank research and research institutions in developed countries. Past contacts between the Bank and such institutions have been characterized by some of the same problems as those encountered with developing country institutions. In certain respects the situation is easier because developed country institutions are better staffed than their developing country counterparts. However, the managerial effort associated with such collaboration is only marginally less than that associated with their developing country counterparts. The Bank has on the whole avoided entering into formal collaborative arrangements with developed country research institutions, although such arrangements have characterized a few of the larger projects.

2.25 We endorse the general reluctance of the Bank to undertake ^{finance} ~~financial support~~ of research ⁱⁿ institutions in developed countries.

We recognize that cases may arise where a special expertise is needed, which is only available from ^{an} ~~a~~ developed country institution. ~~or from~~

~~In such cases, the Bank should retain the freedom to choose~~ ^{individual consultants} ~~in developed countries.~~ ^{in developed countries.}

the consultants best suited to the task.

There will also be cases where tripartite collaboration between the Bank, an ^{open up} IDC institution and an ^{present version} IDC institution ^{accepts, underlines} is the best procedure.

Cf. Srinivasan, last para p.2

Tripartite
- Relative to scale. If big expansion then could contemplate

Bell
6/7/79

Possible addition to para 2.27

Collaboration is obviously necessary. In some cases - research on income distribution is probably a good example - there has been good communication and a series of valuable meetings among researchers from ILO, the Bank, and other agencies interested in the research field. It is the panel's impression that a good deal more can and should be done to insure effective collaboration on research among the Bank and other international agencies. At the same time, we do not mean to recommend a constraining effort toward uniformity: research flourishes on competition and the challenging of one researcher's results by other researchers. The guiding principle for the Bank to follow, in our judgement, is to be very active in communicating its research plans and inviting comments on them, while continuing of course to make its own decisions on what research to undertake.

✓ 2.26 The Bank's contribution to research on development undertaken in developed countries ^{is not} need not be restricted to its financial contribution however. ~~Endorsement by the Bank of research programs can help in securing funding for them from other sources.~~ The Bank can also/ sometimes undertake a coordinating role while only making a minimal financial contribution itself, and should continue to do so.

Other International Organizations

✓ 2.27 The Bank is not of course the only international institution doing research into the socio-economic aspects of development. The greatest potential overlap is with the work of FAO, ILO and UNIDO; there is a smaller overlap with UNESCO and the UN itself. Collaboration is obviously necessary; ^{Add back's} ~~it~~ ^{draft} ~~is done well in some cases and needs to be improved in others.~~ ^{here.}

Data Collection

2.28 It is important to distinguish between three sorts of data that researchers use: (i) episodic data (such as household or other surveys) collected specifically for research, (ii) comprehensive time series data collected primarily for other purposes but also of use in research and (iii) data collected in the course of the Bank's operations, particularly project-related data which can be of use for research. This includes data generated for monitoring and evaluation purposes.

As regards data required for research

✓ 2.29

~~In regard to the first~~, the situation is somewhat paradoxical. While inadequate data are often cited as a major constraint on empirical research, it is also the case that the analytic potential of such data as exist is not usually fully exploited. While there may be several reasons for this state of affairs, an important one is the generally inadequate provision for the documentation and dissemination of such research generated data beyond the initial researchers. Within the Bank as well our impression is that arrangements for the documentation, archiving and subsequent retrieval of research-generated data are ad hoc, and fall upon the analysts rather than on specialized staff.

→ 2.29 here!

2.30

The Bank should recognize that the data ^{sets} ^{and operational} generated are an important output of its research efforts. We recommend that the Bank make a systematic effort at documenting and inventorying such data, 1/ and that it establish the necessary in-house capability in the specialist functions that statistical expertise and data management involve. ~~We regard the payoff to a more systematic effort at documenting, archiving and disseminating data sets as potentially high and even in some cases as more important than that of undertaking new household surveys.]~~

Apart from making existing data available for further research this would help to identify particular instances where ^{new statistical investigation} ~~second round~~ surveying would be fruitful. ~~in establishing the evolution of processes over time.~~

Put in text, phrase. Delete fr.

1/

We understand that such an exercise has been initiated in the Education sector.

May be delete

2.31 As regards further collection of household data we feel that the Bank should continue to do what it has done in the past: finance such collection in specific research contexts as the need arises.

2.32 ~~The issues are different in the second category above.~~

Keep sentence. ~~The institutionalized generation of time series data raises~~ *Keep second sentence*
~~issues far wider than the research needs for such data.~~ The Bank presently has official responsibility within the U.N. system for data on the debt of developing countries and it has moved to discharge this obligation conscientiously. The maintenance of such capacity is an expensive business; but, as far as we can judge, it is a precondition for providing good information to lenders, and ultimately, therefore, serves to widen access by developing countries to international loans. In considering any extension of these responsibilities, three questions arise: the Bank's needs for regularly updated data in particular areas; the Bank's comparative advantage in filling these needs by itself; and jurisdictional issues within the U.N. system.

2.33 On the question of Bank needs for these sets of data, a distinction should be drawn between the need for country specific information using country concepts and definitions, and the need for internationally comparable data series. As the Bank itself has come to realize, these are two distinct needs. Country specific data are useful in the conduct of country policy dialogue. Internationally comparable statistics are essential for both aggregate and cross-sectional analyses. Commentaries on world trends, assessment of development progress and documents such as the World Development Report make use of such cross country data.

2.34 Despite these different needs, the basic source of such data remains national statistical offices and country data systems. The Bank should endorse attempts to improve such capabilities, and to upgrade the quality of these systems. However, direct responsibility for such efforts has to be assumed primarily by the countries themselves with the help of the U.N. Statistical Office. The ^{Expenditures} contribution of the Bank ^{should} ~~has to~~ ^{related mainly} be geared to specific ^{Also} data collection needed for its lending operations or to specific ^{Research or} topics for which it feels a particularly urgent need. ^{Sentence by Malinvaud on non-competition between}

✓ 2.35 A major area where there may be a role for the Bank ^{Survey} to play was identified by the RAPIDE panel: that of income distribution and employment. The panel recommended that considerably ^{Cap.} greater initiative and expenditure be devoted by the Bank to assure ^{Research here,} collection and dissemination of reliable, consistent and continuous data in this area. We have ~~carefully~~ examined this recommendation.

Malin-
vaud,
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3.06

2.36 ~~We~~ were conscious that the aim was not to collect and disseminate data on income per se, which in rural poor communities is even difficult to define, but data on conditions of living. Household surveys provide the proper way of investigation. But setting up suitable surveys, analysing their results and using them for evaluating changes through time in conditions of living is a major operation which, even in the statistically developed countries, still raises a number of problems. The Bank should not expect quick return from ~~its~~ efforts in this area; in particular a long period will be required before any conclusive inference can be drawn from survey data as to the aggregate distributional impact of Bank lending. ¶

2.37 A better knowledge of conditions of living within any country is, however, an important element of its social and cultural development. Hence, the Bank would be justified in promoting such knowledge ~~by whatever means are at its disposal~~. We recommend that ^{the implementation of} this question be studied by ~~a meeting of a few~~ ^{in the area, who would discuss:} specialists ~~who would have to answer~~ essentially three questions: (i) ~~Should the Bank directly promote collection and dissemination of statistical data on conditions of living?~~ (ii) ~~If so,~~ should the staff of the Bank and/or some external organization commissioned by the Bank be in charge of leading this effort? (iii) How should a program in this area be organized from a few pilot surveys to more systematic operations in which international comparability would be striven for? ~~§~~

Relevant Questions

2.38 There do not seem to us to be other major areas in which the Bank should assume the responsibility for coordinating routine international data collection. We do not in any case feel that the Bank has any particular comparative advantage in undertaking such work, nor that it should supplant existing arrangements within the U.N. system. Rather, in areas where it feels the current efforts to be deficient it should seek to operate through the responsible U.N. agency to improve matters.

After 2.29

2.39 In a somewhat different vein, Bank-financed project operations can generate a wealth of data for ~~micro~~ research. These opportunities are only beginning to be exploited. The increasing practice of having monitoring and evaluation ^{arrangements} ~~units~~ set up as part of the project is a promising development in this regard. *Edt* We commend recent efforts to strengthen the technical support for such ^{this activity} ~~units to help ensure their effectiveness in data collection and analysis~~. We strongly support this line of activity and are convinced of its potentially high value for research purposes.

2.40 Apart from its role as a producer of data, the Bank has become a major disseminator of cross-country data via documents such as the World Bank Atlas, the recent 'Atlas of the Child', or the ~~superb~~ 'World Development Indicators' appended to the 'World Development Report, 1978'.

These documents are widely used as standard reference sources

by those interested in development. {Such a role as propagator

imposes responsibilities on the Bank for accuracy, consistency ~~and comparability~~ *and comparability*

~~and comparability~~. We therefore feel that the Bank ought to be

~~more selective in its reporting of data and should not give its~~

~~authority to numbers of doubtful conceptual validity and statis-~~

~~tical reliability. Again, this requires development of statis-~~

~~tical expertise within Bank's staff.~~

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Chapter III

The Organization of Research Within the Bank

✓ 3.01 We deal in this chapter with issues internal to the Bank: the structure of its research establishment, the effects of this structure on the research programs and the machinery for generating and approving research proposals. Our discussion is restricted to social science research financed either through the external research budget or from departmental budgets.

✓ 3.02 We begin with the present structure of the research community within the Bank. The Bank's staff of researchers is currently scattered across a wide variety of organizational units. Only one department, the Development Research Center (DRC) in the Development Policy Staff (DPS), is exclusively concerned with research. This unit of twenty professionals has accounted for roughly a quarter of Bank staff time devoted to research. The bulk of the research undertaken by the DRC is in the form of projects approved by the Research Committee. The major areas of concentration for the DRC have been sector planning models, economy-wide models, income distribution studies and effective protection studies. While the DRC has been a leader in these areas, such work is now also undertaken by other departments.

✓ 3.03 In contrast to the DRC, the remaining units engaged in research at the Bank are functionally specialized, and they also have responsibilities other than pure research. The Development Economics Department (DED) in the DPS, and four departments in the Central Projects Staff (CPS), have a significant mandate for research. The Development Economics Department is divided into five functionally specialized divisions. In addition to research, these divisions also have responsibility for policy work and for supporting regional economic staff in their country and sector economic work. In the CPS the relevant departments have responsibility for functional review and support of projects, for sector work and for development of sectoral policy papers. What is relevant for our purposes is not so much the diversity of tasks mandated to the unit, but rather the tasks assigned to the individuals who constitute the unit. Our impression is that CPS staff concerned with research typically undertake a somewhat wider range of activities than is the case in the DED.

✓ 3.04 Apart from these units in the CPS and the DPS, the Research Committee funding mechanism makes it possible for some operational units (such as regional country program departments) to undertake some research as well, supervised if not always executed by operational staff.

✓ 3.05 Expenditure on research as provided for in the administrative budget is of two sorts. First there are the funds allocated by the Research Committee. This is the so-called "external research budget", and it is used to finance "external" expenditure (on consulting, travel, and data processing) on projects approved by the Research Committee (so-called RPO projects). The size of the external research budget has remained frozen in real terms since 1973, at a level corresponding to roughly \$2.5 million in 1979 dollars. Research projects come before the Research Committee only if they need "external" finance in excess of \$10,000; if not, the expenditure is carried on departmental budgets, and the work is called departmental research (as distinct from RPO research.) These tend to be the smaller projects, but they are numerous: about 60 out of the 140 research projects listed by the Bank in 1978.

✓ 3.06 The other budget item is the imputed cost of professional time spent on research.^{1/} By way of illustration, about sixty-six professional manyears were devoted to research in FY78; this includes both the time of Bank staff and the time of consultants not financed from the external research budget. Half this total, or thirty-three manyears, were directly spent on RPO projects, and the remaining half on departmental studies and other research related activities including research preparation. In FY79, though,

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& B. ^{1/} The unit cost estimate includes an allocation to research of overhead costs, such as the cost of management and the prorata cost of support departments.

professional time devoted to research is estimated to have declined by nineteen percent as staff were diverted to operational and policy work; this would result in almost two thirds of professional time being devoted to RPO research. As Table 2 indicates, the total cost of research in FY78 was around \$10.3 million (in FY79 dollars), but is estimated to have declined to \$9.2 million in FY79. The share of RPO research has ranged from roughly two-thirds to three-quarters of this total.

✓ Table 2: Resources Devoted to Research:
FY77-79
(in millions of FY79 dollars)

	RPO Research			Departmental Studies & Other <u>a/</u>			Total		
	FY77	FY78	FY79	FY77	FY78	FY79	FY77	FY78	FY79
"External Exp."	2.4	2.4	2.5	-	-	-	2.4	2.4	2.5
Manpower Costs	4.3	3.8	4.3	3.9	4.1	2.4	8.2	7.9	6.7
Total	6.7	6.2	6.8	3.9	4.1	2.4	10.6	10.3	9.2

a/ Including research preparation and other miscellaneous research related tasks.

The Research Community

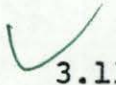
✓ 3.07 This fragmented structure of research units, and the variety of other tasks undertaken by staff engaged in research must have some adverse effects on the efficiency with which they can conduct research. We have therefore considered whether it might not be better to concentrate all major research activity in two or three specialized units like the DRC.

✓ 3.08 A unified research community would have some advantages. First, its staff would be more highly specialized in research, having no operational responsibilities; its research capability would therefore on average be higher than that of units where operational skills rank equally with or higher than research skills. Second, it would probably make management of the research program easier. Third, concentrating researchers into two or three units would help to generate a stronger research culture with benefits in the form of better morale, mutual aid, cross-fertilization and achievement.

✓ 3.09 The disadvantage of consolidating all research into specialized units is that it would remove research still further from operations, reducing interaction between researchers and operational staff. Also, a large research department is likely to develop a life of its own, independent of the central concerns of the institution.

✓ 3.10 While it is difficult for us to enter deeply into organizational questions, it seems possible to suggest some criteria for improving the present organization. Among them would be the following:

- (i) The need for a minimum critical mass, which is now lacking in certain areas. This has been stressed by several of the specialized panels.
- (ii) The need to balance the requirement of continuity of research by individuals against operational involvement. The Bank currently seems to have a number of staff who devote too little time to research to be wholly effective as researchers.
- (iii) The need for a balance to be struck between in-house capacity and use of consultants on individual projects.



3.11 These criteria suggest firstly that, as much as possible, staff engaged in research should be grouped in units of a certain minimum size whose primary focus is research, even if the parent department has other responsibilities. Second, while it may be ^{is} desirable that some staff rotate between operational and research assignments to promote cross-fertilization, care must be taken to ensure that staff, when engaged in research rather than operational support have adequate blocks of uninterrupted time for effective research. Third, while involvement in research implies corresponding time commitments on research collaboration, application and dissemination, care should be taken to allow time for genuine intellectual involvement by Bank researchers in the substance of the research; otherwise the Bank will be unable to retain its best research staff. Fourth, for the Bank to ensure that the research undertaken is responsive to its needs, as well as for better absorption by the Bank of research techniques and results, it is important that the ratio of staff to consultants, on individual projects be kept relatively high.

Editorial

Wa 2, para 2

Clarification of (iii) above.

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Influence of Operations on Research
Relationship between Operations and Research
Coordination of the Research Program

✓ 3.12 Our next concern is the relationship between research and operations in the generation of the research program and the overall management of the program.

✓ 3.13 Currently the operational staff complain that the Bank's research program is not sufficiently geared to its operations. While it is true that some research topics are suggested by operational problems, it is also true that much useful research runs ahead of operations. Nevertheless the Bank has serious operational problems which could be the basis of relevant and interesting research. The question is how to make sure that these problems get on the agenda.

3.14 The answer is in part that the operational staff must have opportunities to affect the Bank's research program, and in part that they ^should have the chance to articulate their concerns through the generation of particular research projects.

3.15 As regards the development of research programs, there is need for additional machinery to bring research and operational staff closer together. We ~~suggest that the Bank divide its re-~~ ~~search by subject matter into major areas, and for each area~~ ~~it create a "Steering Group", consisting in about equal numbers~~ ~~of suppliers and consumers of research in that area (senior~~ ~~members of research units and senior members of operational~~ departments).

Replace by facing text

Editorial: Clarify that a start has been made in this direction.

3.16 Such a Steering Group was established recently in the industry and trade area, with the participation of DPS, CPS, IFC and the Regional Offices. The Group has produced a draft report that makes proposals on research for the next several years, with additional recommendations on staff levels in research and in research applications. We would recommend the Steering Groups consult outsiders, particularly from developing countries in the preparation of such programs. [We would also suggest that these Steering Groups maintain a watching brief on technological research in their areas where this is germane.]

Bell,
para 9

3.17 The research programs of the Steering Groups, once established, would be reviewed by the Research Committee and the Steering Groups would also advise the committee on projects in their area. It might additionally be possible to grant the Steering Groups authority for approving research proposals that are part of an agreed-upon program and do not exceed predetermined budgetary limits. The Steering Groups could review the progress of ongoing research within their areas of responsibility and participate in the evaluation of completed activities. This would enable the Research Committee to devote more time and effort to setting priorities among research areas and to consider general issues relating to Bank research, such as research application and dissemination.

✓3.18 To ensure coordination we recommend making the Research Advisor (whom we would prefer to call the Research Coordinator) an ex-officio member of each of the Steering Groups. He would be responsible for coordinating programs in the various areas. The Research ^{Advisor} ~~Coordinator~~ would also play a promotional role in the research application and dissemination efforts, and in relationships with developing country institutions. He would need additional staff to discharge these duties adequately, and his position would need to be upgraded. [We would expect the Office of the Research Coordinator to keep itself abreast of the Bank's initiatives in technological research, in addition to its principal functions connected with social science research].

Bell,
para.9

✓3.19 Whereas the Steering Groups would develop research programs in particular areas and advise the Research Committee on individual proposals, there remains the need for assistance to operational departments in translating their ideas into research projects. Such assistance should be provided by the Bank's research staff, given their familiarity with Bank operations. Assistance may take a variety of forms: development of joint projects, technical advice in formulation of proposals, and generation of research based on ideas received from operational departments. Whenever appropriate, operating staff may also obtain the assistance of consultants in formulating proposals.

Other Social Scientists

- ✓ 3.20 One final issue relating to the organization of the research community within the Bank is the role of non-economists. As noted earlier, Bank research has been dominated by economics. However, with the Bank's more purposive attempts to engineer^{Encourage + Support} social change and to comment on such change, the Bank will need social scientists in other fields, particularly sociology and political science.
- ✓ 3.21 The number of such staff will probably grow even faster in the operations departments than in research, as the Bank expands its lending programs in such areas as rural development, population, education, health services or urban development. We doubt that it would be appropriate to create within the Bank a separate division for social scientists other than economists. Presumably they will be integrated into existing units in much the same way as economists and engineers now serve together. Our immediate concern is that the point of view of social scientists other than economists should be given consideration by the proposed Steering Groups.

(4.01)

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Chapter IV

Research Applications, Dissemination
and Training

Introduction

4.01 Thus far, we have dealt with the Bank's role in development research, and the organization of research within the Bank. In order for research to influence the Bank's larger program of Waide, country economic, sector and project analysis, it is important para 4 for the Bank to organize an effective application and dissemination effort internally. Since ~~much~~ Bank research is of direct interest to the developing countries, the Bank needs to have an effective dissemination effort externally as well. In turn, the effective absorption of research techniques and ideas carries implications for the Bank's training activities for its own staff and for officials in developing countries. We discuss these issues in this chapter.

Review Application of Research Within the Bank

4.02 As the research program has come of age, there are increasing demands for research application from the operational departments. Such applications usually involve the use of

Clarifi- innovative or more sophisticated techniques (whether developed
cation in the Bank or elsewhere) to the analysis of problems encountered
of what in country economic, sector or project work; though without any
is meant expectation that the work to be done involves methodological
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c^f Duloy.

4.03 The external research budget does not presently provide for such research applications, and there are no explicit budgetary and staff allotments for this purpose in DPS and CPS or in the Regional Offices. The problem is therefore, one of promoting the application of new analytic techniques in the Bank. While it is not our purpose to make detailed recommendations on organizational questions, we wish to outline some possibilities. There seems to be no one best approach, since what will be most effective depends upon the extent to which the procedures can be easily transmitted to operational staff or must be applied by specialists, upon the whether they are 'labor saving' or involve additional staff inputs, and upon the extent of the demand for particular skills and experience within an operational unit.

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^{In some} 4.04 One alternative is to establish central units with responsibility for research applications. We would recommend this alternative in cases where the applications involve the use of highly technical skills; and where there is a minimum efficient size for such a unit, with specialized tasks assigned to its individual members. Such an approach would be appropriate, for example, in the construction of industrial programming and agricultural sector models which could be done on an ongoing basis by central applied analysis units. Such units could maintain a roster of consultants to respond to additional demands as they arise.

At present

4.05 There are cases, however, when highly technical skills are not required. Furthermore, there appears to be substantial pent-up demand for research applications from operational units which are not currently translated into specific proposals. In order to provide leadership in practical applications and to help establish a bridge between the regions and the central departments, the suggestion has been made that new units be established in the Regional Offices with responsibility for research applications. Such units could also assume dissemination and training functions, and their establishment would bring the staff members who design and carry out applications into close contact with operational needs.

4.06 Regional units for research applications would not permit sufficient specialization, however, since the staff assigned to such units could have collective expertise in a few areas only, and could experience considerable variation in the demand for their specialized services over time. Furthermore, staff undertaking research applications are likely to feel separated from the central research establishment. They might consider themselves "second-class citizens" of the research world as their tasks would be limited to applications and they would not carry out original research.

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4.07 The last point could be dealt with if there were regular rotation between the central units on the one hand, and the regions on the other. The problem remains however that, apart from a few areas, such as agriculture and industry, there is not sufficient demand to warrant locating specialists in the Regional Offices. Proximity to operations could involve other perils: staff assigned to research applications might be diverted to regular operational tasks that are regarded as more urgent.

4.08 Instead, we would suggest that leadership in the articulation of regional research needs and in the application of research results in country economic, project, and sector work could be better served by providing the Chief Economist in each region with additional staff. A strengthened office would allow him to discharge such research related duties more effectively, and would additionally permit him to take the lead in regional research dissemination and training efforts, and to promote monitoring and evaluation work in cooperation with the projects staff. In addition, there is likely to be sufficient demand to warrant locating specialists in areas such as agriculture and industry when research applications are combined with monitoring, evaluation and sector work, or to assign a senior economist to the regional Project Director's staff to promote and supervise this work.

4.09 In all other cases, locating staff charged with research applications in the central units would have advantages as it would provide for adequate specialization and would avoid their separation from researchers. In fact, on the example of professors doing both research and teaching, it would seem desirable that members of the central staff engaged in research also undertake research applications and dissemination. Apart from safeguarding the "amour propre" of the staff involved, this solution would ensure that those applying existing research techniques are on the frontiers of knowledge, while the operational usefulness of research would be strengthened by having the researchers associated with applications.

4.10 At the same time, some mechanism has to be found to ensure that application and dissemination are not neglected for the sake of research. One way of achieving this would be to provide Regional Offices with money and "points" to buy consultants and central staff time respectively, for the purpose of undertaking research applications and participating in a regionally-oriented dissemination effort.

4.11 In sum, one needs to consider assigning staff to Regional Offices to carry out research applications in areas where they can be fully occupied as well as strengthening the "outreach" capabilities of central units. This set-up would be complemented by strengthening the offices of the Regional Chief Economists and Regional Projects Directors.

4.12 We have considered so far the question of research applications to serve the Regional Offices. Research applications may also be undertaken to serve the CPS Departments that have responsibility for project lending and do not carry out research. By-and-large, similar considerations apply to this case also.

Dissemination and Training in the Bank

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cation.

4.13 We have made repeated references to the importance of dissemination. While there are several existing channels for research dissemination, we feel that an increased dissemination effort is required to ensure that country, sector and project work at the Bank takes full account of research results, including important research developments occurring outside the Bank. At the same time, dissemination and training are intimately related since it is through exposure to research results and techniques and their absorption that the intellectual capital of operational staff can be maintained and upgraded.

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4.14 One additional channel for the dissemination of research results is the preparation of brief reports on the findings of individual research projects. Such reports should include the results of 'field trials' or other examples of applications which show the relevance of the results for the operational and policy work of the Bank. Their preparation should be an integral part of the research project.

4.15 More generally, state-of-art papers should be prepared to review research areas that are of particular interest to operational staff. The reviews should survey research done both inside and outside the Bank and should focus on establishing generalizations that are relevant for the Bank's work, indicating how the research results and techniques may find operational

toutjes-applications. We understand that such a program of papers is about to commence, and we endorse this development.

4.16 Research reports and state-of-art papers are likely to remain unread in the absence of face-to-face communication between operational and research staff. Such communication could occur in form of seminars and workshops, for which research reports and state-of-arts papers become an input. Seminars may be organized on a particular subject on a regional, sectoral or Bank-wide basis, as appropriate. Holding such workshops away from headquarters would ensure concentration on the chosen topics.

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4.17 Apart from seminars and workshops, there would be need for more informal individual contact between operational and research staff to discuss research-related problems arising from operations. All these avenues would sensitize operational staff to research ideas and results and would sensitize research operational issues. A further spur to assimilation of research by operating staff would be provided if researchers participated in reviewing the output of operational economists in their field. We would encourage the use of researcher time for such review, and feel that in the long run this dialogue would create a more receptive climate for research amongst the operational staff.

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para 7

4.18 Dissemination and training objectives would also be served by extending the rotation of Bank staff, expanding the scope of sabbaticals, and instituting advanced training programs. As to the latter, the Bank could use to advantage EDI-type courses for its staff.

4.19 An increased dissemination and training effort would require modifying existing priorities in the Bank. For operational staff, this would mean setting aside time and resources for such activities on a regular basis. For research staff, participation in dissemination and training efforts, including informal contacts, should be made an integral part of their work program.

Research Application and Dissemination Outside the Bank

*Section
4.20
4.21*

4.20 There are also demands for research applications outside the Bank. This is the case in particular for the application of programming techniques. The proposed central unit or units should be able to satisfy such demands, in part by relying on consultants. Allowance may further be made for outside research applications in some other areas, too.

4.21 The standard vehicles for the dissemination of research results outside the Bank are the Staff Working Paper Series, Reprint Series, and the Bank's Research Publications. These are sent to a large number of research institutes in the developing countries, but far from all. We suggest extending the distribution of these documents to all research institutions of some standing in the developing countries as well as to institutes working on development problems in the developed countries. Also, research documents should be provided to individual scholars in the developing countries that have an interest in a particular area by ensuring a wider distribution of the Bank's Catalogue of Publications where such documents are listed.

4.22 It is particularly desirable that research results reach the officials and consultants in LDCs who are designing projects into which the results could be incorporated.

More frequent arrangements should be made for authors to visit such countries and hold seminars on their results as has already been done in a few cases. Research results should be

introduced into courses at the Economic Development Institute,
^{to the extent possible.}
~~and participants encouraged to transmit what they have learnt to~~
~~project designers on returning home.~~ Resident offices should
 play a role in ensuring proper linkages with the LDC research
 community.

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4.23 Finally in some cases where Bank research has produced
 new techniques that have aroused wide interest (e.g., programming
 methods in large scale industry, effective protection, project
 evaluation, social accounting matrix) the Bank may be asked by
 member countries to send staff to train local staff in the new
 technique. The research budget makes no provision for this; nor
 do departmental budgets. The particular staff members who have worked
 on the research project are not likely to be available for much
 work of this kind. In some cases it might be possible to use
 consultants conversant with the research in question. For this
 purpose, the Bank could pay the cost, not out of the research
 budget but as a part of its general budget. [Where the interest
 Bell, in a particular technique is widespread, training and instruction
 para 11. in it could well be taken over by the EDI].

Chapter V
Size and Priorities^{1/}

✓ 5.01 In this chapter we address the question of how large the Bank's budget for social science research should be, and of what areas of social science research should be given priority.

Size

✓ 5.02 We begin with the observation that the development process in most of its aspects is still insufficiently understood, and that social science research can help substantially to increase the world's knowledge about obstacles to development and how to overcome them. Considering the urgency of dealing more effectively with the stubborn problems of poverty, hunger, unemployment, and ill-health in the world's developing countries, we consider that more research aimed at these issues as well as ^{at} on the development process in general is strongly warranted.

5.03 How much should the Bank do? There are [~~many~~] other ^{individuals} ~~groups~~ and organizations that are able to contribute to the needed research. Plainly ~~the Bank should think of itself as playing a limited role.~~ ^{At the same time} But at the same time, the Bank has the ability to select its own research objectives ^{with flexibility and independence} ~~without being hampered by political constraints.~~ And the Bank is able to mobilize the best resources, wherever they may be found, to conduct the research it undertakes.

^{1/} Paragraphs 5.01 to 5.10 are taken from Bell, Annex 2 with changes from that text underlined; paragraphs 5.11 to 5.18 have been newly added.

(Cont. 5.03)
5.04

There is thus a prima facie case for additional Bank-financed social science research on development: the need for such research is urgent and the Bank is well equipped to undertake it. Before reaching a firm conclusion, however, we ^{have} looked at several further questions.

5.05 ^{5.04}. First ^{is} ~~was~~ the test of performance. Has the Bank's research been of high quality? This question was addressed by the specialized research panels, on whose judgement we mainly rely. They were reviewing the results of over one hundred studies, so they found a mixture of good and bad. One can only ask how this mixture compares with results in other research institutions. The ~~answer is that Bank research is of the highest~~ ^{very high} quality. In a number of fields the Bank is the leader, and in all its work it is highly respected.

^{5.05}
5.06

Second ^{is} ~~was~~ the test of utility. Has the Bank's research been useful? In part, the answer is clear. The results of Bank research are plainly contributing to the Bank's analytical work, and that of member countries, in such fields as trade policy and sector analyses. There are also some good examples of the use of research results in project design: the Bank's projects in transportation and in public utilities would not be the same but for the results of Bank research. In some other sectors (education, population, small scale industry) however, research is still in early stages. ^{and results are only beginning to be seen.} It remains true that the Bank's comparative advantage in project-related research has not been fully exploited, but we have proposed measures to remedy this.

13
 5.07 Third ~~was~~ the test of feasibility. Can the Bank manage well an increased amount of research? We have expressed some doubts about the current administrative arrangements, which produce too much fragmentation, but in our view these defects are easily remediable. The program is not in sight of becoming too large to manage. On the contrary, in some fields of study the number of Bank staff engaged in research may be below the critical minimum. We have also expressed concern that not enough attention is being given to disseminating research results both within the Bank and in developing countries. We do recommend that high priority be given to the measures for improving research application and dissemination outlined in Chapter IV, but we do not believe the resources needed for this purpose preclude an increase in research activity.

5.08 In summary, then, we find the Bank's research record to be good in terms of quality and usefulness, and an increase in Bank research seems both desirable and feasible. By how much should Bank research be increased? There is no way to choose a precise number that is demonstrably superior. In our judgement, having regard to the importance of maintaining high quality and the time needed to plan solid research projects and recruit excellent staff, it might be sensible for the Bank to increase its outlay on social science research ~~by about~~ ^{by up to ten} five percent per year (in real terms) over the FY1978 base in the next several years, including its own staff as well as expenditures from the external research budget, equivalent to nearly \$3 million over a

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five year period (cf. Table 2). Another review like the present one might be commissioned in about five years to make recommendations for the subsequent period.

5.09 In addition to increasing the resources directed to research proper, an increase of equal magnitude is proposed in the resources devoted to ~~collaboration~~, application, and dissemination activities. This would permit increasing the resources devoted to such purposes in central units and strengthening the research orientation of the Regional Offices. Finally, we have recommended increased readiness by the Bank to finance, through loans and credits, enlargement of research capacity in developing countries; [the addition of research training to the program of the Economic Development Institute and the establishment in the Bank of post-doctoral research fellowships or their equivalent as a contribution to the building of research competence in developing countries].

Bell: this is included in research

5.10 These recommendations make quite a long list, but their total cost would be very small indeed in relation to the volume of loans and credits the Bank approves each year. And the potential value, to both the Bank and the member countries, of well-chosen research activities, in our opinion would be many times the costs incurred.

Revised

Priorities

5.11 We have proposed that over the next several years the size of the Bank's research program be increased in the order of five percent a year, including its own staff as well as

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Priorities

5.11 The question of priorities for the selection of research to be financed by the Bank is a difficult one. Precise allocations among types and fields of research, and the choice of particular projects, are matters which the panel considers can only be made by the Bank, taking into account such factors as the current availability of particular skills in the staff and the comparative quality of current research proposals. We have four general comments on priorities, however, based on our review.

5.12 First, we have considered how well the Bank's research program matches the criteria suggested by the Bank's comparative advantages for conducting research which we have outlined in Chapter 2. In general, we believe the research projects that have been selected for Bank support stand up well by these standards: they have made good use of the Bank's comparative advantages of scale, international scope, and ability to mobilize high quality talent. We have noted three qualifications which suggest directions for possible improvement:

- (i) The Bank's research has not drawn as much as it might usefully do upon the Bank's own extensive experience with development projects;
- (ii) There are clearly areas of the Bank's interest - education is an example - in which a somewhat larger and more coherent research effort is needed to achieve a minimum critical size;
- (iii) While we endorse the importance of small projects and individual research in appropriate cases (the initial exploration of new areas, for example), we think some Bank research projects have not had sufficient scale and continuity to yield the results that were hoped for.

5.13 Second, we have looked at the fields of research chosen by the Bank and the relative emphasis given them. A convenient although imperfect indication of relative allocations is given in Table 3, which shows both the intended allocations among fields of research for the ~~three~~ ^{four} (four?) years FY1975-1978 and the actual allocations as they worked out over that period. These allocations are noteworthy for the substantial emphasis given to such ~~newer~~ ^{newer} fields of Bank emphasis as agriculture and rural development, urbanization, and income distribution, in comparison to such older fields as transportation, public utilities, and growth/comparative economic analysis. The panel considers these allocations desirable, and suggest that over the coming period still further shifts in emphasis may be warranted. In particular, we believe the problems of rural and urban poverty on which the Bank is now focussing strongly in its lending program, are not well understood and warrant strong research emphasis. In the case of rural poverty, for example, such research is needed on how to help small farmers, how to increase employment for landless laborers and for women in rural communities, how to assist rural communities to organize and mobilize their own resources, how to bring minimum services of education, health, nutrition, family planning, water supply, etc. to poor rural communities. The Bank is of course aware of these needs and some of its research is directed to these purposes, but it is our impression that considerably further attention is warranted.

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5.14 Third, we have reviewed the reports of the specialized panels, summarized in the Appendix. These reports vary widely in the degree to which they make specific recommendations concerning research objectives and priorities within the fields they studied. They are all, in our view, conscientious and valuable reviews, and several of them make specific suggestions for reallocations

of research resources which we commend for careful attention by the Bank. For example, in the transportation area, the specialized panel suggests that research on rural roads should gain at the expense of highway design; in the energy, water, and telecommunications field, the specialized panel suggest that energy-related research should be given preference over research on electricity pricing. At the same time, we note that the reports of the specialized panels were prepared separately, and they do not add up to a coherent and balanced whole. It would be a mistake for the Bank simply to accept the sum of the specialized panels' recommendations for increases in research resources: this would, for example, give more relative weight to increases in transportation research than we would think warranted.

5.15 Finally, we would encourage the Bank to continue in the future, as it has in the past, to allocate some of its research resources to relatively novel ideas. Successful cases of this type include the Bank's past work on transportation planning and on income distribution. Research in such areas - current illustrations would include experimental research on the socio-economic characteristics of poverty groups - should be recognized as involving relatively high risks. But such research also offers large potential returns, and the Bank is in an exceptionally favorably position to support such endeavors.

expenditures from the external research budget. The question arises, then, how to allocate the increased resources among research areas. While we have received help in this from the specialized panels, all the panels have recommended larger allocations to their area of expertise and these recommendations add up to substantially more than the overall increase we propose.

5.12 It is our view that the exact determination of the allocation among research areas can be made only by the Bank itself, taking account of its own needs as well as the availability of research in particular areas. Our purpose is to provide some general guidelines for allocation among as well as within research areas. The criteria we have stated in para. 2.07 provide an appropriate point of departure for such an exercise. We have proposed there that the Bank should undertake research in areas where "the needs for advances in knowledge of the development process are the most urgent and opportunities for such advances seem promising" and where "research is likely to influence the Bank's project work, the Bank's own operational policies, or the advice it gives to the developing countries".

5.13 In view of the need for interrelationships among research areas, we do not propose to provide a numerical indication of possible allocations among areas. In the case of rural development, for example, research may encompass broader economic aspects, such as linkages to industry and transportation needs, as well as social aspects, such as health and nutrition. Furthermore, as the specialized panels have ably shown, there should be

reallocations of research resources within each area to reflect the changing directions of Bank lending. For example, in the transportation sector, research on rural roads should gain at the expense of highway design; in the energy, water, and telecommunications field, energy-related research should be given preference over research on electricity pricing; and research on small-scale industry and factor market distortions should be expanded while protection would require little further research.

5.14 Although our recommendations have their main effect on the reordering of priorities within major research areas and on the development of the Bank's comparative advantages in certain types of research, we can nevertheless anticipate some changes from past patterns in allocations among research areas. In the first place sufficient priority should be given to research needed to support the newer areas of Bank lending, which requires greater knowledge of fields such as rural and urban development, employment, small-scale industry, energy, health and nutrition. As Table 3 shows several of these priorities were identified in 1975 but not fully implemented - as in urbanization, industry, and rural development - and these should receive greater stress.

5.15 Within each research area, the Bank should follow the criteria we stated in para. 2.07. These would involve exploiting the skills and information the Bank acquires through its activities as a lender and as an advisor; giving emphasis

to comparative studies; focusing on themes and programs of research involving several researchers; and concentrating research in areas where the Bank is willing to support a critical mass of researchers.

5.16 At the same time, as noted in para. 2.18, there may be research topics in which the Bank does not have special advantages but which are not taken up elsewhere although they are of importance for the Bank's own operations or for the development community at large. It is incumbent on the Bank to undertake, or to sponsor, research on such topics as it has successfully done in the past on transportation planning and income distribution. This also includes experimental research on topics such as the socio-economic characteristics of poverty groups and the effectiveness of basic needs policies. Research in such areas should be recognized as having high potential returns but also involving relatively high risks. Further experimentation and evaluation are needed to establish the desirable scale of Bank efforts in these fields. We would encourage the Bank to devote a certain portion of its research effort to frontier areas in which the potential benefits justify the higher risks of failure.

5.17 As far as the content of research is concerned, emphasis should be given to both efficiency and poverty aspects and trade-offs between them. Thus, Bank research should focus on the ways and means of increasing the productivity of resources and of eradicating poverty. The study of interactions and inter-relationships is likely to be of considerable importance as

investment projects in particular areas are interdependent in their effect on reducing poverty while ensuring efficiency.

5.18 These proposals may appear modest but we have had to take account of the fact that existing commitments entered into and staff availabilities will constrain the possibilities of changing the Bank's research program in the next year or two. We trust, however, that general considerations put forward here will be helpful in devising research programs for subsequent years.

Table 3: External Expenditure FY75 to FY78, Compared to Guidelines
(Percentage of external expenditure, in constant dollars)

<u>Category</u>	<u>Guidelines</u> <u>1/</u>	<u>Actual</u>
IA. Growth/Comparative Economic Analysis	11.0	13.4
IB. Income Distribution	14.0	11.4
II. International Finance and Trade	4.0	6.4
III. Agriculture and Rural Development	20.0	17.9
IV. Industry	10.0	6.5
V. Transportation	10.0	11.0
VI. Energy, Water and Telecommunications	5.0	8.1
VII. Urbanization	10.0	7.8
VIIIA. Education	5.0	4.6
VIIIB. Labor and Employment	5.0	7.5
VIIIC. Population, Nutrition, and Health	5.0	4.7
Others	<u>1.0</u>	<u>0.7</u>
	100.0	100.0

1/ Guidelines established by the Research Committee in 1975.

Appendix

Bank Research: Evaluation and Future Priorities

1. This chapter is based on the findings of the specialized panels that have reviewed Bank research in the following areas: Agriculture and Rural Development; Commodities; Education; Energy, Water, and Telecommunications; Income Distribution and Employment; Industrialization and Trade; Population; and Transportation. Each panel has provided an evaluation of past research and has made recommendations on future research directions. Several of the panels have also indicated the implications of the recommendations for the size of the research program.

2. The Research Advisory Panel on Agriculture and Rural Development (RAPARD) concluded that "research in the field of ARD in the Bank is that of a large output of high quality" (p.5) and it "has quite likely contributed to the shift in lending policy toward the small farmer and the rural poor" (p. 6). At the same time, RAPARD criticized the lack of a "comprehensive research program" (Ibid) and noted that "the direct impact of ARD research [on agricultural lending] has been marginal" (p.21).

3. RAPARD recommended that "the Bank's research support for ARD studies should be expanded considerably - roughly in proportion to the increase in Bank lending for the ARD sector (p.21). It further suggested a number of new areas for inclusion in the program. The proposed research directions have been

classified under five major headings (pp. 23-24):

- (I) Nature and magnitude of emerging tasks: links between demography and ARD; water and energy balance; new production techniques.
- (II) Options in key areas: relationships between techniques and institutions; risk, uncertainty, and finance; food and nutrition; factor shares.
- (III) Making the lending program more effective: taxes subsidies, and other incentives; rural infrastructure; 'software' aspects of projects; learning from prior lending projects; strategies for reaching the rural poor.
- (IV) Methodology for projects.
- (V) The process of change: intersectoral models; rural industries, insertion of traditional farmers in the market economy; public utilities.

4. The Advisory Panel on Commodities reviewed Bank operational work on commodities, including commodity forecasts, commodity studies, and papers on lending policy, as well as the few research projects the Bank has financed in the commodity area. The Panel concluded that "the forecasting methods used

compare favourably with those in use for comparable purposes in other organizations (p.3) adding that "continuous improvement of the commodity forecasting should be based more on acquiring a deeper understanding of markets and their functioning than on further sophistication and formal modelling" (p.4).

5. In turn, "the commodity research conducted under Research Committee auspices, though highly professional and sophisticated, has not yet made any significant contribution to the operational and the policy roles of the Bank, and the direction of the work still under way is hardly more promising in this respect" (p.5). The Panel recommended undertaking four research projects:

- (I) The linking of cyclical and trend elements in forecasting the behavior of commodity markets.
- (II) The treatment of inflation in price forecasting.
- (III) The study of comparative costs and productivity in production of selected agricultural and mineral commodities, starting from available Bank information and research projects, with a view to feeding into Bank commodity policy and international commodity policy.
- (IV) The study of factors affecting the location of processing of selected agricultural and mineral commodities, with view to orienting Bank and international development policies.

"It is estimated that the above research projects, which should be monitored by the proposed Bank commodity steering group, would require one additional staff research coordinator in the Commodities Division, plus some \$70,000 of external funds per year for five years" (p.7).

6. The External Advisory Panel on Education noted that "much of the research done is of high quality and quite useful, but for an organization committing several hundred million dollars a year to the expansion and improvement of education and training, the scale is clearly inadequate" (p.28). The Panel proposed "a steady increase over several years in the scale of Bank-supported research on education and training, [and] the development of a stronger research strategy" (p.29). The Panel suggested that research "should be aimed directly at important issues faced by the Bank and borrowers in pursuing major educational and training objectives, [and] it should reflect the comparative advantage of the Bank in doing research: for example, cases in which the Bank can conduct comparative study of activities in several countries, or cases in which the Bank has access to data not generally available" (p. 29).

7. The Review Panel on Energy, Water and Telecommunications (EWT) stated that its "overall view about EWT research is a favorable one" (p.8) it commended the researchers for their "ability to focus on the aspects most relevant for Bank purposes", (p.9); and it further noted that "a number of examples testify to the infiltration of economic analysis into Bank lending to

public utility organizations" (Ibid). The EWT panel proposed a wide-ranging program, including the following subjects, some of which involve practical applications (p. 13-16).

- (I) Energy - general: LDC energy outlook, energy and development; energy demand management and conservation; non-conventional energy.
- (II) Energy - oil and gas: natural gas issues; inter-fuel substitution.
- (III) Energy - electric power: standards of rural electrification; power pricing seminars; power energy pricing; autogeneration, cogeneration, technology monitoring, methods of power supply to remote areas; energy transmission costs.
- (IV) Water supply and sewerage: technology dissemination; follow-up research on technology; resource recovery; multi-city and multi-purpose projects.
- (V) Telecommunications: nature and characteristics of telephone usage; pricing policy.
- (VI) Multisector studies: alternative financing of infrastructure; asset revaluation; appropriate institutions for decentralized services.

8. For purposes of carrying out the research program, the panel suggested an immediate increase in staff from 2.5 man-years to 6.5 man-years and of consultants from 6.5 to 9.5

man-years. This increase is supported by the statement, "we feel that the research activities of the department have been understaffed in the past, its previous record shows that it is very capable of turning out very worthwhile research, and that there is a whole string of important projects awaiting investigation in the near future" (p.24). The recommendations also aim at increasing the staff-consultant ratio in EWT research (p.23).

9. The Research Advisory Panel on Income Distribution and Employment (RAPIDE) noted that the "Bank program of research upon income distribution emerged in a self-conscious, planned fashion [and] the Bank has been prominent in stimulating and pursuing research on income distribution". (Appendix B,p.1). It further concluded: "this review makes apparent both the high quality and varied character of Bank income distribution research. It has been technically proficient and directed to a wide range of problems. ... The productivity of Bank staff compared with academic environments in which research is a large and regular component of responsibility is quite high [and] the deficiencies of this research have related less to its execution than to the erosion of policy orientation and focus on it has been conducted" (p.8). Finally, "the initial Bellagio conference and subsequent publication of Redistribution and Growth has meant leadership role that has not been characteristic of all fields of Bank research" (p.1). RAPIDE "identified four priorities for future income distribution research. These include research upon the characteristics of socio-economic groups; study of the

consequences of different policy interventions pursued by countries to alleviate poverty or improve the distribution of income; specific analysis of the effectiveness and implications of a basic needs approach to the problem of inequality; and comparative case studies of the relationship between national strategies of development and evolution of the distribution of income" (Main Report, p.12).

10. In regard to research on employment, RAPIDE noted that "an evident feature is the generally high quality of the output ... and many of the authors have been acknowledged as experts in the field ... On the other hand, the relationship between the subject matter of research and the operational needs of the Bank has not always been evident" (Appendix C, p.1).

11. The panel's priorities for research on employment are said to be closely related to those for income distribution. "They may be grouped under three categories: careful study of developing country labor markets; analysis of the characteristics of the unemployed; and research on direct and indirect employment creation resulting from different kinds of projects. These generally conform to the emphasis of the Employment and Rural Development Division" (Main Report, pp. 14-15).

12. RAPIDE did not explicitly deal with the question of the size of the research program in income distribution and employment. As regards research on employment, it suggested the need "better to concentrate the efforts of the small number of staff in the Division, and better to coordinate the research

under way in other divisions" (p.17). However, its recommendations on research in income distribution may be assumed to imply an increase in staff. Finally, RAPIDE proposed undertaking a large-scale data collection effort in income distribution and employment that cannot be but rather costly.

13. The report of the Panel on Research in Industrialization and Trade stated: "by and large, we are impressed by the overall high quality of Bank research on industry and trade in economic development" (p.24), adding that "it is our impression that a number of different strands of Bank research have influenced, directly and indirectly, Bank operations (p.26). The panel further noted "that there are certain lines of research at the Bank which in the past have been forceful and productive, but which now are running into diminishing returns" (p. 29) and suggested that, in most of them, an application and dissemination phase should follow. It further proposed new lines of inquiry, together with the extension of some recent work. The Panel's recommendations concern topics related to the trade area, to internal policies and institutions, and to innovation, entrepreneurship, and technological change (pp.22-26).

14. In the trade area, the Panel recommended the expansion of Bank research on export promotion policies and market access and on changing international trade patterns, with special focus on inter-LDC trade. It also recommended undertaking research on "industrial growth paths, trade patterns, and policies to support them [for countries] that are

rich in natural resources, those which are just beginning their industrialization, and those which are extremely poor and have not yet started in developing manufacturing activities" (p.32).

15. Furthermore, it was suggested that the Bank "shift the focus from the economic effects of tariff policies to more general consideration of how policies and institutions influence resource allocation and efficiency within a country" (p.32), with particular attention given to the effects of government policies on labor and capital markets as well as to price control and similar measures. In addition, the Panel proposed expanding research on small scale industry and public enterprises.

16. It is further stated in the report: "We recommend that the Bank explicitly and consciously do research on mechanisms of technological transfer, adaptation of technology to better fit local economic conditions, innovation in industry in less developed countries, and the policies and institutions that support and stimulate technological progressivity" (p.33). Having listed a number of related topics, it is added that an "examination of a set of issues relating to entrepreneurship strikes the Panel as particularly important" (p.34).

17. As regards the size of the research program, the report concluded: "even though we have suggested that some research areas now are mature for application, that others should perhaps be phased out ... , and finally that other types of research should not be 'moved into,' it is obvious that our suggestions would require a somewhat larger research budget in the field of

industry and trade". ... Against this background, it is not unreasonable to increase the number of scholars at the Bank in this field with at least a handful (approximately five), highly competent persons" (p.35). Presumably this number does not include the staff necessary to carry out applications in the industry and trade area.

18. According to the External Advisory Panel on Population, "the Bank's research work has been good as far as it goes but it has not gone far enough. On the whole, it is solid work, but it has been small and fragmented. The Bank's research effort needs to be changed in both magnitude and context: more substantial and more focused" (p. 30). And, again, "the research support for population is disproportionately low - especially in comparison with the Bank's disbursements to the Consultative Group for International Agricultural Research averaging \$2.8 million annually in the past four years. If that sort of funding can be made available for that important field, the Panel considers that the Bank should be able to do better by this important field" (Ibid). The Panel further recommended that "the Bank's research program should deal primarily with (i) population growth and socio-economic development; (ii) operational and evaluational study of family planning and related projects; (iii) policy possibilities beyond family planning; and (iv) demographic data systems in fertility trends and behavior, in collaboration with other agencies" (p. 31).

19. While noting that "the transport research program under review has few signs of actually being a 'program'" (p.8), the Transport Research Review Panel concluded that "the hallmark of this research has been the bridging of the gap between theoretical models and what reality can supply in the form of empirically established relationships" (p.8). Furthermore, "the overall accomplishment has indeed been impressive, clearly placing the Bank and its collaborators in a preeminent position assuming the world's leading research centers on problems of transportation in developing countries" (p.10).

20. As to the future, the Panel suggested that, in the case of research projects undertaken so far, the "emphasis should clearly shift from the research activity proper so wider application and dissemination of results" (p. 10). As regards new directions, the Panel suggested the following areas of research and research applications:

- (I) Highways: highway safety problem; road user charges; bus/trucking regulation/organization; miscellaneous technical guidelines.
- (II) Construction industry: study selected countries; review paper: construction industrial development.
- (III) Ports and shipping: ocean shipping potential; port management problems; ports and regional development; coastal shipping potential.

- (IV) Railways: comparative costs of rail/other modes; practice in service reductions/closures; electrification vs. dieselization; equipment maintenance/utilization; railway information systems; misc. technical topics.
- (V) Roads: .Yeman Arabs Republic feeder roads: phase II; Ethiopia feeder roads: phase II; rural transport needs; domestic regional aviation.
- (VI) Multi-modal and other: process of deregulation; spatial implications of transport projects; social transfers by transport pricing; freight transport chain; risk analysis updating.
Contribution to rural infrastructure research program.

21. The Panel added that, "the recommended program of transport research implies an increase over three years of three Bank staff (from the current approximate seven man-years per year) plus one or two additional transport staff in support of the proposed broader study on socio-economic impact of rural development projects" (p.39). This increase in staff time, and the proposed increase of consultant time by one-half (p.41), includes work on research applications as well.

LIST OF TOPICS

Rural Institutions

Rural Industries

Incentives and Pricing Policy *in Agriculture*

Women in ^{Economic} Rural Development

International Comparative Costs of Commodities *Production*

Location of ^{Primary Products} Processing

- Technical ^{Education} Training and Labour Demand

Energy Policy in LDCs

Water Use and Management

Development Policies and ^{Income} Distribution

- * Labour Markets, Including Migration

Cost of Delivering Basic Services

Small Scale Industry *(including Rural Industry)*

Incentives for Appropriate Technology

? Institutions and Incentives for Industrial Development *and Entrepreneurship*

Policy Implications of Changing Structure of World Trade

- Development and Human Fertility

- Development Policies and Nutrition

Coordination of Transport

^{Urbanization}
Urban Growth Policies

Policies of Public Enterprises

Appendix

Bank Research: Evaluation and Future Priorities

1. This chapter is based on the findings of the specialized panels that have reviewed Bank research in the following areas: Agriculture and Rural Development; Commodities; Education; Energy, Water, and Telecommunications; Income Distribution and Employment; Industrialization and Trade; Population; and Transportation. Each panel has provided an evaluation of past research and has made recommendations on future research directions. Several of the panels have also indicated the implications of the recommendations for the size of the research program.

2. The Research Advisory Panel on Agriculture and Rural Development (RAPARD) concluded that "research in the field of ARD in the Bank is that of a large output of high quality" (p.5) and it "has quite likely contributed to the shift in lending policy toward the small farmer and the rural poor" (p. 6). At the same time, RAPARD criticized the lack of a "comprehensive research program" (Ibid) and noted that "the direct impact of ARD research [on agricultural lending] has been marginal" (p.21).

3. RAPARD recommended that "the Bank's research support for ARD studies should be expanded considerably - roughly in proportion to the increase in Bank lending for the ARD sector (p.21). It further suggested a number of new areas for inclusion in the program. The proposed research directions have been

classified under five major headings (pp. 23-24):

- (I) Nature and magnitude of emerging tasks: links between demography and ARD; water and energy balance; new production techniques.
- (II) Options in key areas: relationships between techniques and institutions; risk, uncertainty, and finance; food and nutrition; factor shares.
- (III) Making the lending program more effective: taxes subsidies, and other incentives; rural infrastructure; 'software' aspects of projects; learning from prior lending projects; strategies for reaching the rural poor.
- (IV) Methodology for projects.
- (V) The process of change: intersectoral models; rural industries, insertion of traditional farmers in the market economy; public utilities.

4. The Advisory Panel on Commodities reviewed Bank operational work on commodities, including commodity forecasts, commodity studies, and papers on lending policy, as well as the few research projects the Bank has financed in the commodity area. The Panel concluded that "the forecasting methods used

compare favourably with those in use for comparable purposes in other organizations (p.3) adding that "continuous improvement of the commodity forecasting should be based more on acquiring a deeper understanding of markets and their functioning than on further sophistication and formal modelling" (p.4).

5. In turn, "the commodity research conducted under Research Committee auspices, though highly professional and sophisticated, has not yet made any significant contribution to the operational and the policy roles of the Bank, and the direction of the work still under way is hardly more promising in this respect" (p.5). The Panel recommended undertaking four research projects:

- (I) The linking of cyclical and trend elements in forecasting the behavior of commodity markets.
- (II) The treatment of inflation in price forecasting.
- (III) The study of comparative costs and productivity in production of selected agricultural and mineral commodities, starting from available Bank information and research projects, with a view to feeding into Bank commodity policy and international commodity policy.
- (IV) The study of factors affecting the location of processing of selected agricultural and mineral commodities, with view to orienting Bank and international development policies.

"It is estimated that the above research projects, which should be monitored by the proposed Bank commodity steering group, would require one additional staff research coordinator in the Commodities Division, plus some \$70,000 of external funds per year for five years" (p.7).

6. The External Advisory Panel on Education noted that "much of the research done is of high quality and quite useful, but for an organization committing several hundred million dollars a year to the expansion and improvement of education and training, the scale is clearly inadequate" (p.28). The Panel proposed "a steady increase over several years in the scale of Bank-supported research on education and training, [and] the development of a stronger research strategy" (p.29). The Panel suggested that research "should be aimed directly at important issues faced by the Bank and borrowers in pursuing major educational and training objectives, [and] it should reflect the comparative advantage of the Bank in doing research: for example, cases in which the Bank can conduct comparative study of activities in several countries, or cases in which the Bank has access to data not generally available" (p. 29).

7. The Review Panel on Energy, Water and Telecommunications (EWT) stated that its "overall view about EWT research is a favorable one" (p.8) it commended the researchers for their "ability to focus on the aspects most relevant for Bank purposes", (p.9); and it further noted that "a number of examples testify to the infiltration of economic analysis into Bank lending to

public utility organizations" (Ibid). The EWT panel proposed a wide-ranging program, including the following subjects, some of which involve practical applications (p. 13-16).

- (I) Energy - general: LDC energy outlook, energy and development; energy demand management and conservation; non-conventional energy.
- (II) Energy - oil and gas: natural gas issues; inter-fuel substitution.
- (III) Energy - electric power: standards of rural electrification; power pricing seminars; power energy pricing; autogeneration, cogeneration, technology monitoring, methods of power supply to remote areas; energy transmission costs.
- (IV) Water supply and sewerage: technology dissemination; follow-up research on technology; resource recovery; multi-city and multi-purpose projects.
- (V) Telecommunications: nature and characteristics of telephone usage; pricing policy.
- (VI) Multisector studies: alternative financing of infrastructure; asset revaluation; appropriate institutions for decentralized services.

8. For purposes of carrying out the research program, the panel suggested an immediate increase in staff from 2.5 man-years to 6.5 man-years and of consultants from 6.5 to 9.5

man-years. This increase is supported by the statement, "we feel that the research activities of the department have been understaffed in the past, its previous record shows that it is very capable of turning out very worthwhile research, and that there is a whole string of important projects awaiting investigation in the near future" (p.24). The recommendations also aim at increasing the staff-consultant ratio in EWT research (p.23).

9. The Research Advisory Panel on Income Distribution and Employment (RAPIDE) noted that the "Bank program of research upon income distribution emerged in a self-conscious, planned fashion [and] the Bank has been prominent in stimulating and pursuing research on income distribution". (Appendix B,p.1). It further concluded: "this review makes apparent both the high quality and varied character of Bank income distribution research. It has been technically proficient and directed to a wide range of problems. ... The productivity of Bank staff compared with academic environments in which research is a large and regular component of responsibility is quite high [and] the deficiencies of this research have related less to its execution than to the erosion of policy orientation and focus on it has been conducted" (p.8). Finally, "the initial Bellagio conference and subsequent publication of Redistribution and Growth has meant leadership role that has not been characteristic of all fields of Bank research" (p.1). RAPIDE "identified four priorities for future income distribution research. These include research upon the characteristics of socio-economic groups; study of the

consequences of different policy interventions pursued by countries to alleviate poverty or improve the distribution of income; specific analysis of the effectiveness and implications of a basic needs approach to the problem of inequality; and comparative case studies of the relationship between national strategies of development and evolution of the distribution of income" (Main Report, p.12).

10. In regard to research on employment, RAPIDE noted that "an evident feature is the generally high quality of the output ... and many of the authors have been acknowledged as experts in the field ... On the other hand, the relationship between the subject matter of research and the operational needs of the Bank has not always been evident" (Appendix C, p.1).

11. The panel's priorities for research on employment are said to be closely related to those for income distribution. "They may be grouped under three categories: careful study of developing country labor markets; analysis of the characteristics of the unemployed; and research on direct and indirect employment creation resulting from different kinds of projects. These generally conform to the emphasis of the Employment and Rural Development Division" (Main Report, pp. 14-15).

12. RAPIDE did not explicitly deal with the question of the size of the research program in income distribution and employment. As regards research on employment, it suggested the need "better to concentrate the efforts of the small number of staff in the Division, and better to coordinate the research

under way in other divisions" (p.17). However, its recommendations on research in income distribution may be assumed to imply an increase in staff. Finally, RAPIDE proposed undertaking a large-scale data collection effort in income distribution and employment that cannot be but rather costly.

13. The report of the Panel on Research in Industrialization and Trade stated: "by and large, we are impressed by the overall high quality of Bank research on industry and trade in economic development" (p.24), adding that "it is our impression that a number of different strands of Bank research have influenced, directly and indirectly, Bank operations (p.26). The panel further noted "that there are certain lines of research at the Bank which in the past have been forceful and productive, but which now are running into diminishing returns" (p. 29) and suggested that, in most of them, an application and dissemination phase should follow. It further proposed new lines of inquiry, together with the extension of some recent work. The Panel's recommendations concern topics related to the trade area, to internal policies and institutions, and to innovation, entrepreneurship, and technological change (pp.22-26).

14. In the trade area, the Panel recommended the expansion of Bank research on export promotion policies and market access and on changing international trade patterns, with special focus on inter-LDC trade. It also recommended undertaking research on "industrial growth paths, trade patterns, and policies to support them [for countries] that are

rich in natural resources, those which are just beginning their industrialization, and those which are extremely poor and have not yet started in developing manufacturing activities" (p.32).

15. Furthermore, it was suggested that the Bank "shift the focus from the economic effects of tariff policies to more general consideration of how policies and institutions influence resource allocation and efficiency within a country" (p.32), with particular attention given to the effects of government policies on labor and capital markets as well as to price control and similar measures. In addition, the Panel proposed expanding research on small scale industry and public enterprises.

16. It is further stated in the report: "We recommend that the Bank explicitly and consciously do research on mechanisms of technological transfer, adaptation of technology to better fit local economic conditions, innovation in industry in less developed countries, and the policies and institutions that support and stimulate technological progressivity" (p.33). Having listed a number of related topics, it is added that an "examination of a set of issues relating to entrepreneurship strikes the Panel as particularly important" (p.34).

17. As regards the size of the research program, the report concluded: "even though we have suggested that some research areas now are mature for application, that others should perhaps be phased out ... , and finally that other types of research should not be 'moved into,' it is obvious that our suggestions would require a somewhat larger research budget in the field of

industry and trade". ... Against this background, it is not unreasonable to increase the number of scholars at the Bank in this field with at least a handful (approximately five), highly competent persons" (p.35). Presumably this number does not include the staff necessary to carry out applications in the industry and trade area.

18. According to the External Advisory Panel on Population, "the Bank's research work has been good as far as it goes but it has not gone far enough. On the whole, it is solid work, but it has been small and fragmented. The Bank's research effort needs to be changed in both magnitude and context: more substantial and more focused" (p. 30). And, again, "the research support for population is disproportionately low - especially in comparison with the Bank's disbursements to the Consultative Group for International Agricultural Research averaging \$2.8 million annually in the past four years. If that sort of funding can be made available for that important field, the Panel considers that the Bank should be able to do better by this important field" (Ibid). The Panel further recommended that "the Bank's research program should deal primarily with (i) population growth and socio-economic development; (ii) operational and evaluational study of family planning and related projects; (iii) policy possibilities beyond family planning; and (iv) demographic data systems in fertility trends and behavior, in collaboration with other agencies" (p. 31).

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Chapter II

Comparative Advantage

Bell: We haven't addressed in text relationship between research in Bank & Research in world

Cherey: hence discussion of c.a.

Bell: ~~If something is not being done elsewhere~~

2.07 (e) Shiller: Bank research too scattered.

" Give

12(e) ~~While natural & appropriate for Bank~~

Discussion: Panel feels that 4(e) is misplaced.

Re Bell: Exploratory research shd. be endorsed
Bank also non experimental studies could be episodic.

Distinction between commitment and scale

Mal. 2.07
~~Don't say~~ (a) and (b) refer back to objectives
There are a different feeling from
(c), (d), (e). 2.07
Say at beginning - endorse objective

Dig out. Old version of comp. adv.

(2)

7th Reason.

- (i) Exp involvement in application
- (ii) International
- (iii) Detachment
- (iv) Size.

State more formally that we accept objectives.

Then go on to criteria how obj Bank should

go. Start with (c). Strike (a) and (b).

Leads

- (c) Project Experience ✓
- (d) Comparative Index ✓
- (e) ~~to~~ Lge projects - but not rule out small projects.

All this subject to anybody else

See:

Lively in relationships with other researchers.
Don't describe Bank as part of worldwide community.

WHL

Points

Either sum up or be specific.

Sy. panels - use their money. Managerial choice.

Specific option: Give the bullet. Then dozen fields and
to given priorities.

Some 20 projects in App. 2. Could select dozen or so.

Neil.

Would we expected to say more about trend in world
development etc.

Paul

Nice to say something about research based knowledge
regarding dev. process.

Leave Bank unguided if we offer us selection
from spec. panels. From both pts. if view desirable
outcome to go beyond and up to specific.

Cherney

Not specific in 2 ways.

(i) Take 30 topics + give 1/2 priority - difficulty
is that changes within topics rather than
of topics.

(ii) Share through interaction of
criteria with topics.

(iii) Put up.

Bell: Small farmer focus in research.
have some research emphasis.

Rural Poverty
Urban Poverty
Human Capital

Lewis Not clear that Bank shd. be involved in technical assistance.

Islam: These agencies don't exist to finance transfer of research techniques.

Bell: No reference to EDI apart from my inserts

M'vand Agree that EDI is for propagation of proved techniques. But for something before that may not be appropriate

Islam: Is the difference purely one of teachers? Or also clients?

rdi: Also clients. A more specialized one

Bell: Suggestion in draft is that SPS add a training wing.

Massad: 4:20 doesn't distinguish between ^{external} research applications & research dissemination.

Bell - Bank does build instn. Lewis: Difference is between Bank initiating where

2.18

Massad -

May be way to do

DPS and CPS Responsibilities in Research

1. OK for panel to identify particular areas where set up hasn't worked particularly well -

Banner

DPS + CPS have suffered pretty by freezes.

Critical mass: Real concern: lead adv. in having staff moving across spectrum. Facilitates dissemination, application.

Small scale of chief economists keeping up etc. Big scale would have serious opp. costs.

Projects director staff: Either/or rather than both.

Critical mass: Group stayed intact through research period.

Bell: How administratively overloaded is the approval process.

- Chenery:
- (i) Not necessarily
 - (ii) Steering groups will help
 - (iii) RC should focus more on policy.

Would like to give an indication

WYC — Prepare some notes on cost. Bracketed material.

Longer time perspective — 5 yrs.

Admin Expenditure

~~Lending~~ Proj

Lending Budget.

5.05

Mention that these estimates do not cost labor collection Expenditure - "In addition data collection..."

Data retrieval shd. be coded.

Application + Dissemination Discussion 2:30pm

Hansen

Chief Economist staff - generalists. Specialized applications centralized

Caution: Changes within Categories.

A para on 5 or 6 areas - application of criteria

Isam General comments. But a rather different set of general comments.

para 5.02 categories not same as categories in Table 3.

Balasa Tried to do in para. 5.11.

5.13 5.14

5.13 5.14
Bell with try drafts.

Analysis

(5%) misleading.

5.09 p. 51.

Massad: 5.09 Relative importance of research as an activity in Bank.

Bell: Prop std. make conservative recommendation consistent with quality. 5% low relative to investment. Note with desired relative objective in Bank

Comments

Mr. Berry

OFFICE MEMORANDUM

TO: Mr. M. Yudelman

DATE: May 3, 1979

FROM: D. Turnham SUBJECT: Draft Report of the General Research Advisory PanelHighlights of the Report

1. The Bank's role in research. The Panel is generally complimentary about the quality of research and its relevance or appropriateness to the special institutional framework within which it is undertaken. The Panel also endorses the current approach to institution building via collaborative projects with LDC institutions, though it says that more could be done to involve these institutions in the research program (e.g. bringing local researchers to Washington more frequently). The Panel does not recommend that the Bank take on some more general responsibilities in primary data collection/general improvement of data quality, via e.g. program support for statistical agencies. A critical comment is that not much use is made in research of the Bank's project experience or of project generated data; project specific M&E for example, provides the basis to do more and more should be done. The Panel also strongly recommends collaborative projects to help with system development for project M&E and technical backstopping.
2. The organization of research. While there are costs in fragmentation, the Panel argues against centralization, e.g. the establishment of single function research departments. It recommends though, that research always be undertaken through research units, even if the primary function of the parent department be something other than research: the report stresses minimum critical mass, that research suffers if diluted by too many other things, and that good researchers will not be retained if other tasks are loaded onto them.
3. Increasing operational relevance is a felt need: to deal with this problem, the Panel recommends that 'Steering Groups' be established for each major subject area (with representation from the research and operations management) to define research programs. The Research Committee would then concentrate on the review of research programs; the Committee should consider devolving some responsibility for approving detailed proposals to the relevant Steering Group if these are part of an agreed program. Researchers should give more help to operations specialists to define their research needs.
4. Research applications, dissemination and training. The Panel suggests new special purpose central units to handle highly technical applications (e.g. programming models), as demand warrants. It considers, but rejects, regional units to handle application problems but opts for a new post of research adviser in the office of the Chief Economist. Central research staff should help with applications; a staff member might be seconded to a regional office to work on applications when the demand warrants this.

A further possibility would be for the user departments to have a budget to buy assistance of this type either through consultants or (a manweek 'points' system) through staff.

5. For dissemination, the Panel recommends that brief reports summarizing research results be prepared as an integral part of all projects and that more 'State of the Art' papers be undertaken (not literature surveys, but establishing the relevant generalizations) also more seminars and workshops on research results for operational staff. Specific time should be earmarked for such purposes. More effort should be made to distribute research results to the developing countries, including a budget for field level dissemination and training in selected cases.

6. The size of the program. Quality and relevance win high marks (project related research aside) and the size of the program is not within sight of becoming unmanageable. The Panel recommends a future growth rate of 5% per annum in real terms covering staff and the external budget, excluding the extra budget required for additional activities, e.g. training, dissemination and applications.

Comments on the Draft

7. The Bank's role in research. The points made in the draft seem sensible enough and are well taken by this reader. As a critical theme, I liked the stress on the lack of project problem research and the complementarities to be exploited between project specific monitoring and evaluation and research (paras 2.05, 2.16-2.19, 2.34). More could have been made of this theme in the later chapters.

8. The Panel does not choose to deal explicitly with such questions as the sorts of research that the Bank should not undertake, nor does it seek to establish a perspective on the role of the Bank vis-a-vis the world research effort on LDCs, nor the accomplishments relative to that wider setting. Some material along these lines might have helped to identify subject areas where (with some element of hindsight) a greater effort might have been warranted and others where perhaps too much was attempted. More use might have been made of the work of the specialized panels in this regard.

9. The Organization of Research. This chapter might usefully have been quite a bit more pointed. There are several questions bearing on organization and efficiency that are not discussed. The absence of this discussion makes the final recommendation (the 5% recommendation) less convincing than it might have been otherwise. For example, is the balance of emphasis by subject area about right (staff RPO money and departmental resources)? One side effect of a frozen budget for research has been some tendency to freeze existing structures, divisional responsibilities, staff specializations, etc. Does this have implications for flexibility (an ability to generate a critical mass to pursue some new line of investigation)? Does this have any bearing on the comparative neglect of project related issues? The FY77 budget data shows a preponderance of staff

input - close to 80% of total expenditure - is this about right? Is it cost-effective (cf the USAID model which has been quite different)? The proportionate outlay in LDC institutions is surely rather small - how does this relate to the institution building objective? Similarly, the data show that close to 40% of resources are not spent on RPO studies passing through the Research Committee: Is the Panel satisfied with this? Is there any quality difference or difference relative to operational relevance? The ratio of resources for project preparation (the Panel's definition of other expenditure) to RPO expenditure is 1 to 3. Is this not rather high? Does this say anything about the Research Committee process? Or perhaps about the efficiency of research management? The Panel rejects a centralized research organization but argues for research to be organized in terms of minimum critical mass. What specifically, is meant by the latter? Are there not intermediate options between the status quo and the fully centralized option?

10. The suggestion to establish Steering Groups for the major subject areas seems to be a good one, particularly if these group areas are allowed to take on approval of specific projects within an agreed plan (and probably preset budget limits). The work of the Research Committee - so far as I have been able to observe it - does suffer from too much focus on detail and not enough attention to either strategy questions or the evaluation of completions and potential uses thereof. Obviously though one does not want too many panels.

11. The Chapter includes what look to be a couple of afterthoughts, i.e. use of research staff in helping operational departments to formulate proposals and the role of non-economists. Both issues could benefit from a more considered treatment in my view. Treatment of the latter struck me as particularly weak. Suffice it to say here that operational problems often involve issues for which economists skills are not particularly helpful; that during the 1970s there has been a running debate about the need for multi-disciplinary research in such areas as rural development; and that non-economist inputs would be very important if the recommendation that research departments lend more support to the development of project monitoring and evaluation systems is to bear fruit.

12. Research applications, etc. This was clearly a difficult chapter to write and the recommendations are tentative. It is perhaps hard for a research-oriented group to write convincingly about applications. In this regard, I think the Panel miss one important point that such applications as there may be should not be limited to whatever output flows directly from Bank research projects. I would guess (even with a more operationally focussed program than has been the case until recently) that the Bank itself would generate only a minority of the potentially usable results. While operational staff are not totally removed from research, they would, I think, expect some service from the researchers in applications resulting from the big research picture as well as the comparatively small internal one. It is though, something of a dubious general proposition that researchers are well placed to readily identify what research applications there may be. In my experience, researchers usually find it quite difficult - even from their own work - to identify what can be applied (at least in the projects context). In this respect, the summary or highlights paper recommended as a standard product at time of project completion and operationally-oriented

'state of the art' papers are potentially very useful innovations to spark operational interest and reaction: the operational readership for the long research product is small in my experience. Some of the other ideas in the Chapter, e.g. for applications groups and research advisers in the Regions, are worth careful consideration, however, budgetary implications seem likely to argue against expansion to quite the degree the Panel is recommending (taking into account all the activities proposed as additional to the main research budget itself). The concluding chapter should, I think, explore some of the sub-optimal options. For example, to take an extreme case, supposing no overall increase in resources for research, to what extent should activities like training, dissemination, applications, etc., divert part of the resource flow that currently is directed towards the actual doing of research?

cc: Messrs. Bery, Pickering, Donaldson

DTurnham:hrv

OFFICE MEMORANDUM

DATE: May 4, 1979

TO: Mr. Graham Donaldson, Chief, AGREP

FROM: Pasquale Scandizzo, AGREP 

SUBJECT: REPORT OF THE GENERAL RESEARCH ADVISORY PANEL - COMMENTS

1. The overall impression gained from the General Advisory Panel report is of a well written, eminently sensible evaluation of the Bank research program. Despite the fact that neither the criteria used to evaluate the present performance nor the objectives of the present research effort are given any prominence or even made explicit, the report manages to capture some of the key features of Bank research and exposes some of its most pressing problems.

2. Against this generally positive judgement, however, I would note two key weaknesses in the present form of the report. First, the report fails to address squarely and substantively the problem of the size of the research program. Second, the report is weak on operationally useful recommendations and on suggested ways to improve the present organization.

3. On the question of the size of the program, I feel that the summary consideration given to the size and distribution of resources devoted to research is not sufficient to provide an informative picture of the quantitative aspects of Bank research. Unfortunately, both the specialized and the general panels seem to have subscribed to the view that there was no need to go into any depth in the analysis of the inputs and outputs of the research program. More specifically; (i) only a very aggregative view of the size of the program is presented in one single table (Table 2, p.23), (ii) no account is taken of the balance between the different components of research expenditure, (iii) no measure of size is developed, and (iv) as a consequence, no substantial recommendation is made as to increase in the overall dimensions of the program, the amount of resources to be devoted to the different tasks, their allocation to external expenditures and manpower, and their distribution among DPS, CPS and Regional staff.

4. The report fails to recognize that the balance between external and manpower expenditure is a key to understanding the conditions under which research is presently performed in the various departments of the Bank and in different sectors. In the case of ARD research, for example, the lack of a critical mass of researchers is presently being sidestepped by the financing of temporary staff through external research funds. Clearly, this is not a desirable long-run solution and staff needs should be recognized as such and budgeted accordingly with some minimum degree of continuity. By not questioning the rationality of this ad hoc method of resource allocation, the general panel appears to have substantially eluded also the issue of how to achieve a minimum critical mass in the present or future research units.

5. On the questions of the recommendations on how to proceed from now on, what to change, etc. the report also maintains the mild tone of a benevolent overview. While I find it hard to disagree with any of its specific recommend-

ations, I also feel that (i) either they are too vague, or (ii) they tend to partially contradict each other and/or the analysis, or (iii) where they appear to be justified, they do not go far enough in recommending concrete steps for implementation.

6. The suggestion that applied research units be located in the Regions for example, is an interesting one, but is not consistent with the recommendations developed for the present research units, the need for a minimum critical mass of researchers and the proposed increase in size of the research program. The same comment applies to the suggestions on dissemination, seminars, and workshops. It is hard to understand how, without a substantial additional commitment of resources, and especially staff positions, one can expect the Bank to (a) expand its research program along the several lines indicated by the special panels, (b) multiply its research applications, and (c) increase extension and training activities. Given the small size of the proposed increase in the research program, either some of these activities will have to be foregone, or the increased resources will have to be somewhat more concentrated than is suggested in the report.

PScandizzo:mt

OFFICE MEMORANDUM

TO: Mr. Bela Balassa, VPD

FROM: Montague Yudelman, AGR *20-7*

SUBJECT: GRAP Report and Mr. Picciotto's Memo of April 19

DATE: April 23, 1979

The general approach seems to be to centralise direction of research by having a series of panels who will formulate priorities (other than leaving research topics to individuals as in academia); centralise management of research by strengthening the office of the research coordinator but decentralise research operations by giving the regions an opportunity to carry out their own projects. This means, of course, that the regions will have to allocate time and effort to managing and undertaking research. Given their very tight budgets and manpower constraints - as I understand it - then this may create a new set of problems for regional managers unless the resources are used by other than Bank staff.

I have argued - in the case of Indonesia - that a lump sum should be made available to the regional office, to be managed by their office, to finance research into land related issues. This is a totally neglected area and is important to us and the government; it is a politically sensitive area too. Therefore, I strongly recommended that the research should be undertaken by local institutions. This issue is now being discussed. The resources for this work, if it is to be done, will most probably, come from the regions' budget. I do not believe that the current procedures of the research committee are appropriate for an activity of this kind.

In so far as agriculture in general is concerned, there seems to be a lack of appreciation of the vast amount of work that is being done outside the Bank. The literature on agricultural development has become a torrent. I doubt if many of us have much time to assimilate it.

There are, however, still gaps in terms of the kinds of questions we have to deal with. In this regard one of the dilemmas confronting us is that most people in the Bank admonish against undertaking household surveys but stress the need for learning more about the impact of Bank lending. I submit it is not possible to do the one without the other! In my view two issues that need to be addressed and which are relevant to our current preoccupations indicate:


a) The impact of interest rates on resource allocation and the farm level. Our Board is preoccupied with questions relating to on-lending and the effect of interest rates on the substitution of capital for labor at the farm level - especially on small farms. Very little work has been done on this and we need to know much more about it as we continue to lend billions for rural credits.

b) Cost recovery and public savings in the rural sector. The whole question of rural savings in the rural sector through cost recovery from users and general fiscal policies is a very vexing issue; it is debated ad nauseam at our Board. Staff are in a very weak position in dealing with this; too little is known about the subject. There is a crying need for further investigation.

cc: Mr. Picciotto

MYudelman/sm

OFFICE MEMORANDUM

TO: Mr. Aklilu Habte
FROM: Mats Hultin 

DATE: April 30, 1979

SUBJECT: Report of the General Research Advisory Panel

1. As requested by you, I have reviewed the Report of the General Res. Advisory Panel (revised third draft of April 17, 1979). These are my comments. I have no major problems with the recommendations of the report as such and agree with most of them. My overall reaction to the report is, nevertheless, one of some disappointment. I do not feel that the recommendations provide enough guidelines for future research work in the Bank. There are a number of issues which could have been dealt with in greater depth.

- (a) I had expected indications about the sectors of the Bank activities (agriculture, urban, education, etc.) which should be given particular emphasis in future Bank-financed research. I had also hoped for an in-depth discussion about the Bank's comparative advantage of doing research in specific sectors.
- (b) There are few indications about the model of research to be given preference in the Bank: observatory and analytical review research, or experiential field research, or state of the art papers, etc.
- (c) The report recommends a 5% annual increase in the external research budget, but the financial and manpower implications in the Bank of the increase is not being fully explored.
- (d) The report suggests rightly a larger regional involvement in the research, but it does not provide a guideline as to how such increased involvement could be achieved. What kind of incentives would be given to the regions to do research, possibly at the expense of lending operations? To have a budget is not enough.
- (e) The role and obligations of CPS to disseminate research is not well explored.
- (f) There is a discussion about administration of research in the Bank, and the current roles of various Bank units, but I would have expected more about the current problems with risks of overlapping of research and sometimes unwarranted "competition" between the various departments and divisions, and the way the research proposals and research papers are being reviewed.

- (g) We should solve the dissemination problem before we launch out into a very much larger research program. The current program is largely appropriate, but the dissemination has not been efficient. Efforts should then be made to improve the dissemination rather than expand the program further for the time being.

2. On specific paragraphs of the report, I have the following comments:

Paras. 2.05 and 2.34: I agree fully with the suggestion that the Bank should more systematically explore its project experience for research purposes. There is a large amount of data in the Bank that would be beneficial for the research society and for development, which is unexploited.

Para. 2.12: I do not like the argument that the Bank should make "additional investment in time and money . . . for the sake of collaboration."

Para. 2.26: I agree with the last sentence of this paragraph.

Para. 3.03: The last sentence of this paragraph is correct.

Para. 3.10: What is a "minimum critical mass" for research?

Para. 3.15: I support the idea of "steering groups", but thought that the Bank already has something of this nature in the "research panels".

Para. 3.21: I support the proposal that we should have more social scientists involved in research.

Paras. 4.05 and 4.09: I do not agree with the idea to establish units in the regional offices for research applications. This should be the responsibility of CPS.

Para. 4.15: It is self-evident that a Bank literature survey should include a discussion about findings relevant to the Bank's operations.

Para. 4.22: I agree with the recommendations.

OFFICE MEMORANDUM

TO: Mr. S. Bery, VPD

DATE: May 3, 1979

FROM: Akililu Habte, EDC

SUBJECT: Draft Report of the General Research Advisory Panel

1. We did not have sufficient time to circulate and discuss this report among education staff. I did, however, ask two of my colleagues to review it, and their reaction, with most of which I concur, is attached.

2. There are several points raised in the report, especially in the dissemination area with which I concur. I did not feel the urge to repeat them.

3. In my brief reaction I have intentionally singled out those areas which made me uneasy, or left me perplexed, or simply points that require further clarification or discussion.

(a) Does the Panel agree with the four Bank research objectives enunciated in 1971 (para. 1.01) to be adequate, comprehensive and relevant? It may be implied but an explicit statement by the Panel either way would be welcome.

(b) In toto the report does not provide us with more and better guidance than those provided in the specialized panels. Let me illustrate my point by using the education sector panel. The External Advisory Panel, amongst other things:

- pronounced that the scale of research done is inadequate;
- recommended a steady increase over several years in the scale of Bank-supported research on education and training;
- advised the "development of a stronger research strategy".

A comprehensive internal OED exercise, after reviewing the Bank's experience in 54 education projects in 17 countries, supported the above recommendations amongst other things "an increase in its (Bank's) funding". (See Report No. 2321, Review of Bank operations in the Education Sector, paras. 11, 13 (vii), 7.01-7.12, 8.12.) What is the position of the General Research Advisory Panel? To what extent does it/doesn't it concur with these recommendations? It is not helpful to talk about "critical mass" when there is no hint what is a minimum or desirable range of "critical mass" of research staff, say in a sector like education? Do we need another committee, the fourth for education to translate the Panel's criteria? I think we could do better.

- (c) The discussion on the Bank's role in research while adequate could be more focussed and sharpened, e.g. point (d) in para. 2.04 could be interpreted to mean that the Panel recommends the Bank to continue with those areas where already the Bank "possesses a critical mass of qualified researchers". What if there is no "critical mass" already? no support? no involvement? or is that what is intended?
- (d) The phrase in para. 2.12 "for the sake of collaboration" is denigrating, unacceptable and, in my personal opinion, unfortunate for various reasons better left unsaid than said. Please also cross refer to Mats Hultin's statement on the same topic.
- (e) Para. 2.15 needs more work. I concur with para. 3 of Steve Heyneman on this issue.

4. In the areas of organization and application of research within the Bank, this section handles an important and difficult issue of organization, comes close to grappling with sensitive and jurisdictional issue, but in the end we are left nowhere. Here again somebody else is required to make the difficult decisions. The role, comparative advantage of CPS in the generation of research topics reflecting operational realities, dissemination of research findings, training of staff, etc. is barely or shyly touched on (para. 4.02). On the other hand, the establishment of research units in the regional offices with responsibility for research applications (para. 4.05) is suggested. How would/could this present a better alternative than the already existing mechanism? Wouldn't strengthening, in staff and financial resources, the actors on the stage, be a better alternative? Or is what is being suggested, something that is intentionally meant to replace existing mechanism? In that case, would it be possible to give the justification?

5. Size of the program: This section could also be clearer and more straightforward. For example, what is intended by the statements: "In some other sectors research is just starting.... But it remains true...." (para. 5.07). It does not say much to me; whatever the sentence is intended to mean, could it be stated?

6. In conclusion, may I express my appreciation for the opportunity to comment on the draft. Perhaps a more adequate opportunity to air our views in the earlier phase of the Panel's work could have clarified some of our questions. As it stands, I fully concur with my colleagues who have felt the report needs more work.

cc: Mr. W. C. Baum, CPSVP

Attachments

OFFICE MEMORANDUM

TO: Mr. Aklilu Habte, EDC
 S.H.
 FROM: S. Heyneman, EDC

DATE: May 2, 1979

SUBJECT: Draft Report of the General Research
 Advisory Panel

Commonalities with Other Reports

1. This is the fifth Panel report to call for a significant step up in the amount of project evaluation activity.^{1/} This is a uniform recognition that the Bank has a distinct comparative advantage in carrying out this function, as well as an obligation to its Executive Directors to do it well. But previous reports have yet to stimulate any significant new resources to do the job, and I remain to be convinced that the results of this report will be unique.
2. The same point is valid vis-a-vis the call for more non-economists (para. 320-21).

Omissions and Errors

3. It is perhaps correct to avoid "block grants to socio-economic research institutions" (para. 2.07); but the report overlooks the role those institutions play in our lending program. It is significant. In the last decade we have assisted 33 university faculties and 49 non-university institutions with programs of research and training. With this in mind I cannot understand how the report could come to the conclusion (para. 2.15) that "institution building efforts independent of research collaborations...does not seem to be an appropriate task for the Bank to undertake".
4. The Education Sector maintains a current list of data sets and instruments previously used. This has been overlooked (para. 2.27).
5. I do not think it accurate to say that "the Bank has begun regular post evaluations of completed lending projects" (para. 2.05).
6. The "Steering Group" formula (para. 3.15) is not new to the Education Sector.
7. The Regional Research Units (proposed in para. 4.05) duplicate the function of CPS. These functions include research dissemination (between regions), training, and project monitoring and evaluation.
8. It cannot be guaranteed that consultant monies allocated to the Regions for "undertaking research applications and participating in regionally-oriented dissemination efforts" (para. 4.10), would be

^{1/} External Advisory Panels on Education and Population, the OED Review of Operations in the Education Sector, and the Dosik Task Force on Monitoring and Evaluation.

Mr. Aklilu Habte

May 2, 1979

spent for the purpose intended. This report demonstrates a surprising naivete about the structure of rewards in the operating divisions.

In Sum

9. This report is weak. It hasn't yet come to grips with the main issue. The main issue is why the Bank hasn't already allocated sufficient resources to plan research for new directions in projects, learn the lessons of project impact after the implementation stage, and disseminate that information effectively. The main problem with the report is that it hasn't taught us anything new; it goes in several wrong directions; and it never gets to the reason why obvious deficiencies remain unameliorated.

cc: Mr. M. Hultin, EDC

SH:th

OFFICE MEMORANDUM

TO: Mr. Montague Yudelman, Director, AGR
 FROM: Graham Donaldson, Chief, AGREP

DATE: May 4, 1979

SUBJECT: Report of Research Advisory Panel

1. I agree with the attached comments, which encompass several points made by members of this Division.
2. In respect of the point on manpower (para. 4) it should be added that in AGREP we have deliberately used Research Committee funds to hire consultants to work in-house in order to obtain the critical mass required for creating effective study teams. Doing this has the added advantage that consultant supervision requirements are substantially reduced. Our experience has been (eg: the Agricultural Prices and Subsidies Study) that we both lacked the necessary critical mass for successful execution of large studies, and lacked the staff members required for supervision of large numbers of outside consultants.
3. In respect of the proposal to locate research staff in Regions (para. 6) I would add that, while applauding the intent of the proposal, ie: to increase the operational relevance of the Bank's research program, such a move would not only increase fragmentation of an already diffuse program (especially in ARD) but likely reduce the inclination of Regions to work jointly with research groups in DPS and CPS. There may also be a loss of research capability if Regionally located research staff get pulled into operational activities (as seems possible given the fate of staff time allocated to sector work in some Regions).
4. The fact that the funds nominally allocated for ARD research by the Research Committee are never fully drawn on (usually about 60-70% is used in any one year) is, in my view, strong evidence of the understaffing of research groups working on ARD.

cc: B. Balassa (VPD) D. Pickering (AGR) J. Duloy (DRC) AGREP Staff
 S. Bery (VPD) / D. Turnham (AGR) M. Leiserson (DED)

GDonaldson:mt

OFFICE MEMORANDUM

TO: Mr. B. Balassa

FROM: Ardy Stoutjesdijk *AS*

SUBJECT: Draft Report of GRAP

DATE: April 30, 1979

Mr. Ben King asked me to have a look at the draft report of the General Research Advisory Panel. Please find my comments attached.

cc: Mr. B. King
Mr. J. Duloy

Ardy Stoutjesdijk
April 30, 1979

Comments on GRAP

This report contains a number of interesting suggestions with regard to the future scale and organization of the Bank's research program. It does so on the basis of an evaluation of past research that on the whole demonstrates admirable perception and understanding of the constraints under which research in the Bank is carried out. However, it is from time to time clear that the report is the product of the collective insights of external observers, as a result of which it is not always as constructive, critical and to the point as it could have been. At the same time, it is disappointing precisely where a fully external evaluation was expected to be helpful, namely to provide perspective to the Bank role in research by placing its program in the context of the world-wide analytic research effort on economic development.

GRAP gives high marks to the Bank's research quality, and relates watered-down versions of commonly expressed complaints and criticism of the research units mainly to the absence of adequate institutional arrangements. This is not likely to silence the critics of the Bank's research program, for good reason. A substantial proportion of Bank research is, or if one wants to be kind, was not of particularly high quality, and/or is concerned with issues in which the Bank has dubious comparative advantage. Moreover the final product is often undigestible except for a specialized audience, and insufficient dissemination takes place. While not placing sufficient

emphasis on these aspects of past performance, the report is complimentary regarding several research projects that have been successful without noting that some of these projects started off as methodologically oriented projects (agricultural sector modelling as a component of a complex multi-level planning exercise, industrial sector planning with the question: "Does interdependence matter?"). Such method-oriented research has for long been heavily criticized in the Bank as being "irrelevant", whatever that may mean, and it does not figure explicitly among the research areas in which the Bank should be involved according to the Gospel of GRAP (see para. 2.04). Is not there a lesson to be learned from past experience?

There is not a word to be found in the report that throws light upon the question whether the time of researchers is efficiently utilized, or whether present procedures for research generation are efficient. Nevertheless, Table 2 on p. 23 reveals that \$1.9 million out of \$6.9 million of manpower costs in research are devoted to "mainly research preparation", or not less than 27.5 percent, and the equivalent of 19 man-years! Personally, I believe this figure is too high and includes all kinds of miscellaneous tasks. But the fact remains that in FY77, only three-quarters of the manpower associated with research was devoted to RPO financed research or to Departmental studies. There is evidence that the manpower allocation has improved since then, particularly in FY79; unless something is said along these lines in the report, it could quite easily undermine the recommendation for expansion.

The effort required for adequate dissemination, application and assimilation of research is grossly underestimated. To take the case of sector programming as an example, it would not be difficult to employ a group of 6-10 people full-time, on agricultural and industrial sector models alone. To the extent that supply generates its own demand in this area, the number of persons required to provide this service may well have to grow over time. One area where the question of proper perspective comes in is whether the Bank should go this route, whether other institutions should take over (FAO, UNIDO), what role should be given to EDI, etc. Basically, the issue is whether the Bank's research program should be linked in with a greatly expanded technical assistance function (internally, as well as externally).

Finally, a number of less general points. In para. 2.04, the report lists a number of criteria to be used to decide which research areas should be developed. While points (a) and (b) could be interpreted to do so, although not in a particularly restrictive manner, points (c) and (d) relate to the organization of research rather than its orientation. In para. 3.15, the report proposes "a new piece of machinery" in the form of area-specific Steering Groups to bring research and operations closer together. However, as the report notes in the next paragraph, such a Steering Group already exists for trade and industry research, and a similar one is being organized on urban poverty. A patent was already taken out on this particular innovation! In this context, although I can see some merit in delegating budgetary responsibility from the Research

Committee to area-specific panels, I can also foresee grave difficulties in the case of proposals for research in overlapping areas, and methodological research. I would hope that the Research Committee would retain its current responsibilities at least for such research. In paras. 4.15 and 4.16, GRAP mentions the production of state-of-the-art papers and workshops, as vehicles for research dissemination. This proposal originated with the Bank's research units, and has been under discussion for some time, involving operational staff and research staff; the first few workshops are being organized. The report might say so.

OFFICE MEMORANDUM

TO: Mr. Bela Balassa, Acting Research Adviser, VPD

FROM: John H. Duloy, Director, DRC

SUBJECT: Draft Report from GRAP

DATE: April 27, 1979

This draft reads well and holds together, apart from in a few places. All my comments are of a particular nature, and I will therefore give them on a paragraph by paragraph basis.

Para. 2.15

It would be helpful to set out the reasons why this is not an "appropriate" task for the Bank.

Para. 2.32 - 2.34

It is not clear whether GRAP endorses RAPIDE's recommendation on data collections, or not.

Para. 3.09

I am not sure whether these fears are justified. Certainly, Bell Labs would not suggest that these adverse developments necessarily are associated with a large research department.

Para. 3.15

The "Steering Group" suggestion is certainly worth trying. Some suggestions also for reducing the very heavy administrative burden associated with the research dollar would be even more welcome.

Para. 4.xx

It would be helpful to define what a "research application" is. Presumably, this means the "D" of R&D, or some pilot applications following the research proper phase. If this is what is meant, then generally the researchers must be mainly responsible for carrying it out. On the other hand, to implement some methodologies (e.g., those involving mathematical programming) on a routine basis, continuing support is required for operational staff, e.g. an applied operations research capacity, which the Bank presently lacks.

Because of the lack of a clear definition, I found this chapter very difficult to comprehend.

Para. 4.08

I think that strengthening the Chief Economist office is called for, but not necessarily for this reason.

Para. 4.10

Without a definition of research applications, it is impossible to form a judgment on this recommendation.

cc: DRC senior staff

COMMENTS ON GRAP

2.04 Although the area is implicitly covered, explicit emphasis might be given to research on international issues, beyond "comparative studies," and, specifically, the impact of international issues on domestic ones (e.g. protection by developed countries or international migration or world inflation on employment and distribution in developing countries).

2.10-2.15 The discussion here might distinguish more clearly between (a) institution-building, (b) institution-strengthening and (c) institution-linking. (c) is useful if it is desired to mobilize local expertise for work done now within the Bank. (b) is encouraged, but (a) is ruled out in 2.15. The possible conflicts between (b) and (c) are not explored.

3.12-3.19 I wonder whether these proposals meet adequately the need to bridge the gap between operations and research. The representation of operational people on the Steering Groups presupposes that these people have formulated the questions they need research on, and can communicate them to the researchers. But this is often not so. More radical measures are needed: researchers themselves have to articulate the operational issues as research projects. For this other solutions are required. (Some are discussed later but not adequately. "Sensitizing" is not enough.)

3.20/3.21 The section on "other social scientists" is disappointing. Interdisciplinary research raises problems similar to those of bridging the gap between research and application. Adding sociologists to the Steering Groups will not touch the problem.

4.15 State-of-arts papers should not only indicate how research can be applied, but should also point to gaps in the knowledge of operational personnel where usable research does not exist.

While the emphasis on operational application is correct, there is also a more indirect way that deserves emphasis. The generation of ideas, not directly relevant to Bank or country policy, can make, in the long run, a profound contribution to policy-making. The Report is silent on this.

OFFICE MEMORANDUM

TO: Mr. S. Bery, VPD

FROM: E. Bevan Waide, ASNVP *VBW*

SUBJECT: Report of the General Research Advisory Panel

DATE: May 11, 1979

Here are a few comments on the draft, for onward transmission if it is not too late. In general, I agree with the findings and the points below relate only to possible differences of view.

1. The report notes that the Bank has a wealth of data of various kinds collected through its various operational activities and it goes on to suggest that better use should be made of this. While it is clear that the Bank will have a comparative advantage in undertaking research that requires access to such data, it is not clear to me that such research should be regarded as having high priority unless the end product of the research is also of high priority. Nor is it clear that high priority should be attached to data dissemination (para. 2.26 et seq). In short, the existence of data, like any raw material, is not of value in itself.
2. In para. 3.07 et seq it is somehow conveyed that researchers have to fight off other demands on their time; para. 3.07 talks about "obligations imposed on researchers". Para. 3.10(ii) notes that the Bank has a number of researchers who devote too little time to research to be effective. The general point here, that researchers have to spend substantial and continuous periods doing research if they are to be efficient, is quite fair. However, the Development Policy staff have genuine functions other than research and, indeed, research is after all only a means to the Bank's various operational ends.
3. The idea of Steering Groups seems to me to be sensible, although I would question the recommendation in para. 3.16 that outside researchers be involved. Certainly it is useful, from time to time, to have outsiders evaluate not only the utility of research but the methods used by operational staff so as to produce ideas on what research needs to be done. But to have outside researchers on the steering groups would lead to the risk that research will become (or remain) producer oriented. If the experience of the Industry and Trade Steering Group is any guide, users have the utmost difficulty in formulating their research needs and if anyone needs support it is they.
4. Chapter 4 in various places (e.g. paras. 4.01 and 4.08) refers to economic and project work: I suggest that sector work be included as well.
5. In para. 4.08, I fully agree that the idea of establishing the post of research advisor in the Chief Economist's office. The multitude of demands on a typical Chief Economist is such that he cannot devote enough time to this topic and it could well take a full-time advisor. The research advisor should, however, be concerned not only with dissemination but also with origination of research needs. I doubt, however, whether the Chief Economist's office should

May 11, 1979

contain "leading specialists"; rather, they would best be located in the respective DPS divisions such as population, industry, trade, etc., where they can keep their professional skills up-to-date yet be available as specialists to help the operational departments who may not themselves be able to justify having such a specialist on their staff at all times. Incidentally, if, as Chapter 5 suggests and I agree, the real resources devoted to research rise by 5% a year, then the dissemination function will rapidly increase in importance not least because the rate of completion of research projects is, at present, still accelerating.

6. In para. 4.09 I take it that "central units" refers here to DPS as well as to CPS. The point about "operational usefulness of research would be strengthened by having the researchers associated with applications" is worth repeating, e.g. in para. 3.07.

7. In paras. 4.16 to 4.19 it could be mentioned that research dissemination is facilitated if operational economists know that the professional content of their work is going to be judged by top researchers in their fields. Unfortunately, the review function has separated the researchers from the doers and I hope they can be brought together again.

8. Lastly, it is suggested in para. 5.04 that the gap between research and its use by operational staff "relates only to some part of the project-related research". This is not so — country and sector analysts have equal difficulty in using research results.

cc: Messrs. Chenery
Balassa (o/r)
Picciotto

May 10, 1979

Sir Arthur Lewis
Woodrow Wilson School
Princeton University
Princeton, N.J. 08540

Dear Sir Arthur:

I thought I should convey to you my comments on the Revised third draft report of your panel. I will confine myself to Chapter 2 on The Bank's Role in Research. Let me preface my remarks by saying, firstly, that these are my personal views and secondly, that they probably reflect, what Hollis charitably refers to as the Indian perspective and what others, less charitable, call Indian arrogance!

I am afraid I found this chapter rather fuzzy. From the fact that Bank needs research output as explained in para 2.03, it is not immediately obvious that it should produce it. Except in your discussion of Bank's collaboration with other research institutions, this issue does not figure at all in your report. Mr. McNamara's foreword to many a research publication of the Bank starts with "I would like to explain why the World Bank Group does Research work ..." but it really is an excellent explanation of why research is necessary and useful and not why the Bank should do it. I think some forthright views on this issue should be expressed by your panel and this should precede a discussion of choice of areas.

Indeed the first of the four criteria for such a choice listed in para 2.04 could equally well be used to delineate areas in which Bank should do research inhouse and those in which inhouse research need not necessarily be the mode. The comparative research to which you refer in this criterion, is to be based on Bank's accumulation of data, experiences and judgments relating to several countries covering a wide spectrum of socio-economic-political environments. Clearly, the most cost effective way of drawing lessons relating to the "development process" from this body of information is to do research on it within the Bank. Such research will be in conformity with an avowed objective of the Bank to contribute "to the understanding of the development process" (Bank's Annual Report, 1978, p. 97) and several of past research by the Bank falls in this category. Whether other non-comparative research should be done inhouse or not, has to be decided on a case by case basis. Perhaps, one can state a broad principle, that except for areas in which a certain amount of detachment (I prefer this word to the more loaded word objectivity) is essential, most other research could, as far as possible, be farmed out to local research institutions where they exist. The second of your criteria, namely, that research should lead to application in project work or to affect Bank policy stances, etc. is too broad to have any discriminatory power. After all, Bank projects cover a wide range from agriculture to

telecommunications and its advice probably covers an equally broad spectrum. The third criterion, for selection, namely, that Bank should choose themes that involved team research and not individual research, is offered without any case being made for it. I am not sure whether you had in mind an interdisciplinary team. The fourth criterion, of choosing areas in which a critical mass of researchers exist, could well apply to any institution. Besides, it is rather meaningless in the Bank context, where resources could be used either to do research in areas where such critical mass already exists or to devote part of it to acquire the critical mass and then do research in another area. More thought should be given to drawing up a meaningful set of criteria.

I hope you will pardon my saying so, but the section on research collaboration with developing country institutions could as well have been entitled, "Development Research is too important to be left to Developing Country Research Institutions", in spite of your endorsement of such collaboration in para 2.08 and 2.20. I cannot escape the inference, from your paragraphs in between, that what you are implicitly recommending is the research counterpart of what in the bad old days used to be called "a bankable project" - "bankable research and bankable researchers"! A bankable collaborative research project, presumably, is one which is devoid of most risks, will analyze a pre-existing and reliable data base, will involve the least management headaches and will involve the use of "bankable researchers". The latter, I presume, are either from developed country institutions or those like you and me, who can be termed "bespoken researchers" with traceable connection to developed country institutions!

The problem of institution building cannot be easily wished away. Research institutions in developing countries, have often run into a core melt down - the critical mass accumulated painfully over a period melting away instantly! The issues are complex. In such a context, the statement that collaborative research is the only or the most desirable vehicle through which institution building in LDC's can be encouraged by the Bank is much too categorical. My own view is that such collaboration can at best sustain an already existing institution, but it is unlikely to build it. It is possible that until such time when most developing countries have their own scholarly institutions concerned with development research, the Bank may be the only institution capable of maintaining a strong research group. But this is not addressed in the report.

I am thoroughly mystified by para 2.22. What is the "technological input" that is being talked about here - computers and software? large scale modelling technology? or does it refer to some pre-existing Bank contract involving financial support to a developed country institution? The last sentence of this paragraph is at once lofty, in that it recommends that the Bank should be free to "choose the best consultants regardless of nationality" and at the same time insulting to LDC researchers, in that this recommendation is placed in a para dealing with financial support to developed country institutions!

The section on Data Collection appealed to me more than the other sections, maybe because I expressed similar views in a recent memo to Hollis (enclosed). I will only add that inventorying and documenting the data collected in LDC's through past surveys is in itself a monumental task. The Indian Council for Social Science Research initiated such a Data Archive project. But my impression is that it has not yet got off the ground precisely because of the nature of the difficulties involved. However, any future survey, financed by the Bank or others, should include provisions for full documentation, storage and relatively free access to researchers of data collected.

Finally, there is the question as to what types of research can thrive independently of the nourishment provided by teaching graduate students, discussions with colleagues, etc. Are there many instances (outside of military or industrial research) in which an institution without a university link has nevertheless continued to do quality research? Maybe this is too far outside your panel's terms of reference. I do think a discussion of research environment is in order.

On a lighter vein, I am enclosing for your amusement, a note which I presented in a meeting organized by OECD some years ago.

With warm regards,

Sincerely yours,

T. N.

T. N. Srinivasan
Development Research Center

encls.

cc: Messrs. J. Duloy, H. Chenery, B. King, B. Balassa,
E. Malinvaud (France).

From: Planning, Income Distribution, Private Foreign Investment,
Development Centre, OECD, 1974.

Appendix to Part I

THE STATE OF DEVELOPMENT ECONOMICS (1)

by Mr. T.N. SRINIVASAN,
Indian Statistical Institute, New Delhi, India

I wish to share (at the risk of not being invited to such conferences in the future) some random and rambling thoughts on some disturbing trends in development economics. It is possible that my comments arise from my experience as an Indian economist. But I do think that others may have had a similar experience. If at times I sound harsh, it is in part (and only in part !) due to my desire to etch some points in vivid colours. I must emphasize at the outset that the targets of some of my critical remarks do not exclude me.

Let me start with a very harsh comment attributed (maybe falsely) to one of the top-most theoreticians in the profession of academic economics. In his view, (and he was speaking primarily of western economists) those who cannot make the grade as mathematical economists, statisticians, monetary or trade economists or economic historians usually end up either as labour economists or worse still as development economists. I am afraid that there are more than a few grains of truth in this. One has only to look at some of the articles published in respectable international journals to discover that some of the authors are frustrated multivariate analysts and model builders.

There is a depressing similarity of content in these articles. A typical article of the multivariate genre will consist of "data" on m variables from n countries for T periods. No matter whether some of the variables are quantifiable or not, the numbers meaningful or not, reliable or not, the tools of statistical analysis applicable or not, the author goes merrily ahead and "tests" his or her pet theory with the data. It should cause surprise to no one, if in this age of electronic computers and imaginative computer programmers, some even abandon altogether the task of developing a "theory" and testing it. The computer, given the data and the programme, will fit a multitude of possible relationships, linear and non-linear, etc., and select the best fitting set ! All the author has to do is to rationalise and interpret this ultimate set. Given the vagueness of most development theories, this should not be too difficult. Of course, I am exaggerating, but only a little. To most, one more country or one more year in the sample only means one more degree of freedom for error in their regression analysis ! This is not to deny that there are some who do discuss the inadequacy and unreliability of data used, often in an appendix. But, more often than not, the discussion will conclude in one of two positions :

- a) data are bad, but they are either the best available or the only data available and the analysis must proceed, or
- b) the data used are bad, but the conclusions of the analysis are unlikely to be changed significantly if different data were used instead.

1) This document was distributed by the author at the plenary session during which were given the general introductions to the three topics of discussion.

While those who hold view (a) do not consider not proceeding with the analysis with bad data as a possible alternative, one cannot but admire the self-confidence of those who hold view (b). It is not surprising that they do not think it necessary to consider any alternative set of data or models !

Let me now briefly touch on a typical member of the model building genre of articles. No self-respecting, card carrying member of the model building school will build a model that is less in size than the capability of his computer to handle ! If enough disaggregated data do not exist, add more time periods. If data on some crucial coefficients are not locally available, borrow from another country in which the consultant happens to have worked previously. After all, why not ? The technology shelf belongs to the whole world. The most important thing is not to leave the computer memory under-utilised ! Most members of the model building school also generally do not pay adequate attention to the meaningfulness and the reliability of the data they use. Those who do pay some attention can also be classified into two groups :

- i) bad data do not affect the conclusions group, and
- ii) the "sensitivity" analysis group.

I have already commented on group (i). Group (ii) is more honest - they cheerfully admit that they have no idea whether, say marginal propensity to save (MPS) is 0, . 1, or .4. But wait, the computer can grind out the solution to the model for each of these values and if the results are sensitive to the values of MPS, devote more resources to pinpointing the precise value of MPS. One cannot quarrel with this view, except that the mind boggles at the number of alternatives that one may have to examine in any real life situation. If there are only five parameters, each with five possible values, in principle one has to examine $5^5 = 3125$ solutions to the model !

In passing, I may mention also the two-sector dual economy school. Many a reputation and career rest on ironing out yet another wrinkle in this simplistic model !

There are some unfortunate aspects to this model building and/or econometric emphasis in economics in general and development economics in particular relating to (a) the training of economists in or from less developed countries (LDC), (b) allocation of resources, including the resources spent on visiting foreign economists. First on the training of professional economists. If a budding economist from an LDC wishes to join the roster of economists who attend conferences, wangle visiting professorships abroad, go on consultancy assignments, work for international organisations at a salary far beyond what he can get at home, he has to get his training abroad in a prestigious school and/or publish articles in international journals. If he gets his initial training at a domestic prestigious economics/department (which means, incidentally, a school which is the home base, at such time as when they are not abroad, for bespoke economists of the international conference circuit), more often than not, he is likely to enroll in the courses given by those economists on optimal growth or the latest asymptotic theory of simultaneous equation estimators. He may be unable to tell you whether his country's population is growing at 2% per annum or 20% per annum, but he surely can tell you the transversality conditions arising in an infinite horizon optimal growth model, or about the core of an economy with a continuum of traders. One can sympathize with this student - after all, an A grade in courses on growth models or the like given by eminent economists is more likely to secure him admission in a foreign university than a course, however useful it may be in other respects, on, say, the rural economy of his country. If he follows the journal-article-publishing route, he runs into

more or less the same situation. In order to maximise the probability of publication of his article in a prestigious journal, he is very likely to look for problems on which he can apply the latest and the most fashionable tool of analysis he has learned and not necessarily for problems of importance for his country's economic policy. Thus he may try to publish yet another article applying Pontryagin's maximum principle or spectral analysis or factor analysis or estimating a Philips curve for country X or a CES production function for its bookkeeping industry using non-linear estimation techniques !

Suppose this student returns home after establishing his reputation. He may settle down in a good academic or government job and fly abroad frequently to attend conferences. Alternatively, he may get frustrated in an academic job (particularly if he is one of a very few who have had similar training) because none of his colleagues can talk the same lingo and dreams of the "atmosphere" of academic give and take and scientific inquiry at the institute abroad where he did the research for his doctorate. I do not deny that there are some who do not aspire to remain in grace with their peer group abroad by publishing articles of the type mentioned earlier and devote themselves earnestly to important problems with no academic thrill value. Maybe they are more numerous than I think they are. But still they are probably far fewer than required.

Let me now turn to the allocation of research resources, national and international. On data gathering : a concomitant to the flow of assistance of international lending agencies and from some larger donor countries, it has become necessary to collect and present data in straitjackets prescribed by these agencies. This sometimes results in providing a local number for a concept which has limited local meaning; for instance, a global unemployment rate for a largely rural economy, or even GNP where the GNP in conformity with international conventions excludes housewives' contributions but includes an item which is similar and significant, namely consumption out of homegrown stock in a peasant economy. Often, data gathering gets confined to areas which are of limited relevance to the domestic economy but are easier to keep records on. Information on vital sectors of the economy does not get gathered. Resources, become more easily available, particularly from foreign resources, for instance for building a large input-output model for a rural economy than for collection of data on unorganised sectors. Perhaps paradoxically, and then perhaps not, even these large input-output exercises will treat the entire agriculture as one sector or worse still as completely exogenous. Yet this sector may be the main sector of economic activity.

Another instance of international data gathering at a vast resource cost is the calculation of so-called effective protection rates of different processes for scores of countries. Even before the meaningfulness and relevance of this concept in simple theoretical models were worked out, measurement on a vast scale has been completed and a number of conferences held and volumes published.

The comments made earlier in connection with research topics chosen by students in LDC's apply also to allocation of research funds by research institutes in LDC's. It is not infrequent that scarce resources are spent on "imitative" research.

Finally, a few words on visiting foreign economists and economists of the lending and donor agencies : I hope my remarks will not be misunderstood. After all, some of my best friends are visiting foreign economists. Very often the visitor is in a country for a short time. This visit to research institutes in the country may be primarily for the purpose of collection of data for his model. More often than not, he may not even bring an outline of his research. The institutes may be treated purely as data providers with no say in the use

to which the data may be put to. There have been instances where foreign economists have easier access to and have advised policy makers on the basis of their models even before these models were discussed with the economists in the institutes which provided the data. In fairness, I must add that many foreign economists have thrown invaluable light on these economies which, but for them, would not have come about, but there are also situations in which the value of the contribution of the resident foreign economist covers his marginal cost.

In conclusion, it appears that development economics needs a sort of a "cultural revolution". But such a revolution, if one comes about, will not, I hope, substitute sentiments for substantive analysis as is alleged to have happened when radical economics appeared on the western scene.

OFFICE MEMORANDUM

TO: Mr. Bela Balassa, VPD

FROM: Luis de Azcarate, Chief Economist, WAN

SUBJECT: Draft Report of the General Research Advisory Panel

DATE: April 26, 1979

1. The points I find most interesting in this paper (after only one quick reading before leaving on mission), and which I support, are the following. First the suggestion that the Bank research make more use of project experience (para. 2.05). Second, the creation of a steering group to cover each area of research (para. 3.15 f). I believe that if properly staffed and given appropriate terms of reference the steering groups could be the instruments to ensure proper cooperation between researchers and operators, especially the Regions. If so, I do not think that the "central units" for research applications (para. 4.04) or the "regional research adviser" (para. 4.08) would be necessary. Each steering group would have an indicative figure, or proportion, as to funds to be allocated to "pure" and to "applied" research and by the same token would have to determine which projects fall under each category (the exact criteria do not matter much). Third, the linking of dissemination and training (paras. 4.13 - 4.19) is excellent. It should be realized, of course, that this would involve a much greater participation in this process by researchers, for example in the form of several workshops (say, one by region) for one given topic of interest.
2. I would expect the Panel, now, to suggest some priorities among the long list of topics selected by each of the specialized panels and listed in the Appendix. The Panel may also wish to suggest new areas (for example the idea of more comparative studies mentioned in para. 2.04 (a) is not well captured in that list of topics). I have an impression also that while justifiably most of these items proposed by the specialized panels are forward looking, some room might be left for research on the historical development experience of selected countries.

Lde Azcarate/it

OFFICE MEMORANDUM

TO: Mr. Bela Balassa, DRC

FROM: Helen Hughes, ^{MM}EPDDR

SUBJECT: Priorities in Bank Research

DATE: June 1, 1979

1. With respect, following the discussion at the meeting of the Industry and Trade Steering Group on this subject, I would like to follow up the suggestion I made at the meeting for broader consideration.
2. It seems to me, after participating in the Bank's research program as both a researcher and a manager since its inception, that the determination of priorities in research within and between the major areas of development remains a difficult problem. Views about what is important continue to range widely not only between but also within various Bank units, and the operational units' needs clearly vary very considerably among regions. As a variety of views on research priorities occurs even in relatively small academic economics Departments, the Bank's problem is not unique, but merely greater. It is presumably the reason why most of the research panels came up with a la carte rather than table d'hote research menus.
3. I do not want to exaggerate the problem. In a sense the selection of priorities is working reasonably well; the research review panels have indicated that on the whole we have done quite well in the past. The program has reflected the research interests of the Bank's DPS and CPS leaders in each field, but, as the Industry and Trade Panel at least has indicated, that is not a disadvantage.
4. However, despite the growing regional participation in the budget, there is no doubt that the regions, and particularly the working economists at all levels, feel that their views are not represented in research selection and that they do not have a real opportunity to influence the priorities. The research review panels all reflect this in one way or another. The Bank as a unit is too large for initiatives from the bottom to function in a meaningful way unless the decision-making process is broken down into smaller units. While all priority-setting continues to rest with the Research Committee, the DPS and CPS researchers, with their superior resources for the task, will continue to have an advantage over the Operational Departments. Not only is this bad for staff morale and inter-departmental relations, but I am sure that the Bank is losing by not picking up more initiatives from "bottom up".
5. I am convinced that the only effective remedy is to give the regions research funds which would be subject to Research Committee quality control, (that is projects would have to measure up in methodology etc.) but not for priorities.
6. Given the present and likely development of budgets and staff work load ratios, I am convinced it would be futile to put faith in special

research slots in the Regions. Moreover, it is the staff who are there now who want to have a crack at research participation, and the Chief Economists are certainly capable of organizing it. The region as an administrative unit can determine priorities in a meaningful way. If staff are not involved or consulted, the responsibility will lie directly with the senior and chief economists, directors and vice presidents concerned. I am sure that if the regions had funds, they would find research formulation assistance from DPS and CPS more forthcoming, and in any case, a part of the sum should be seed money to get projects organized.

7. One hundred thousand dollars per region for an initial experimental period of two years would not cripple the research budget, and it would not involve extra staff or funding (though of course it would be nice if we could get the latter as well). There could be substantial additional benefits in getting to developing country research institutions through regional economists' contacts, and in dissemination. The researchers and users of research would be one. I think that they would be sufficiently motivated to publish to overcome the work load problem. I would be surprised if the research would be less professional than it is at present, and the regions would have themselves to blame if they were not relevant and operationally directed. The program could be reviewed after a couple of years. If it is working a larger share of the budget could be spent this way: if it is not, it could be abandoned.

c.c. Messrs. Chenery, VPD
Gordon, DFC

Chief Economists

EPD Front Office & Division Chiefs

HHughes/kg

May 8, 1979

Memorandum for Sir Arthur Lewis

Copy to: Mr. Balassa ✓

From: David E. Bell *DB*

Subject: Comments on Draft Report, General Research Advisory Panel

I have several comments on the April 17th draft, which seems to me a substantial advance over previous versions. While I think there are important further improvements to be made, I believe we are now in sight of a useful product.

1. My first concern is that the Panel carry further the attempt in paras 1.05-1.07 to identify the various elements of the Bank's involvement in research, and to state the Panel's approach to them. I think more should be said about all this than is now in the draft, and I have tried a re-draft (Annex 1 to this memorandum) to show what I mean. There are various blank spaces in which I assume Mr. Balassa can insert the requisite numbers.

2. In para 2.01, I think two sentences need to be added to set the stage properly for Chapter II:

-I suggest adding as a new third sentence in para 2.01: "To a small extent the Bank is, and to a much larger extent it could be, a significant contributor to building up research capacity in developing countries."

-I suggest also adding at the end of para 2.01: "As noted earlier, we discuss here only the Bank's role in social science research."

3. Para 2.03 troubles me because the criteria it specifies seem much narrower than those enunciated in 1971 (as quoted in para 1.01). In 1971, I think correctly, one objective of Bank research was stated to be "to broaden understanding of the development process." I think it is important to maintain such a criterion in allocating Bank research resources, because it recognizes that the Bank should serve the wider world not only through projects and through policy advice but through broadening the world's knowledge - as the Bank indeed has done, as witness the effect of some of McNamara's (research-based) speeches.

4. Following up this point, I would think the first criterion to be stated under para 2.04, should be something like this:

"(a) The Bank should choose research subjects and areas in which the needs for advances in knowledge of the development process are most urgent and opportunities for such advances are most promising."

5. The last sentence of para 2.15 seems to me wrong as a matter of policy, and contrary to present Bank practice which in some cases (agricultural research, for example) is vigorously supportive of institution building efforts. In place of the last sentence, I would suggest something like the following: "There are several ways in which the Bank can appropriately support such institution building efforts:

"(i) financing the expansion of research capacity under project loans and credits (as the Bank now does in some cases such as agricultural research);

"(ii) including research training in the scope of the EDI both in Washington and overseas; the type of research training that would be appropriate for the EDI would primarily be - as is the case with other EDI programs - short courses and workshops stressing applications of research methodologies to practical development problems;

"(iii) establishing a number of post-doctoral research fellowships, available to persons who have completed academic training and worked for a period thereafter in their own countries, where the fellowship (for two years as a maximum) can be shown to be an appropriate part of a staff development process for a research institution in a country seriously lacking such capacity."

6. Para 2.19 seems to me doubtful as a matter of policy, and also contrary to present Bank practice which, in supporting the core budgets of the international agricultural research centers, is supporting institutions for research of their own choosing. The appropriate rule for the Bank to follow is not easy to state, since quality control is the essential element. Perhaps the paragraph could be re-written, after the first sentence, somewhat as follows: "This may be an effective method for the Bank to follow where there are adequate arrangements to ensure high quality selections of individuals and institutions. There are beginning to be regional cooperative arrangements in some parts of the world which are developing standards of quality control the Bank (and other research funders) can rely on. We would encourage the Bank to move cautiously but positively in the direction of making such research grants, in collaboration with other funders. Experience in the United States and elsewhere suggests that supporting researchers in what they want to do, in areas that coincide with the general research objectives of a funding organization like the Bank, can be the most effective form of research support."

7. Para 2.20 would need adjustment if the foregoing suggestions are accepted. I suggest deleting the last sentence, and adding to the fourth sentence: "and undertake additional activities of an institution building character."

May 8, 1979

8. Paras 3.01 through 3.06 use a very narrow definition of research in the Bank, and need to be appropriately related to the broader definitions used earlier (as in para 1.05). Probably the simplest way to do this is to state, in para 3.01, that the panel is dealing in this chapter only with social science research financed through the "External Research Budget" and through departmental budgets.

9. Paras 3.12 through 3.19 seem to me sound, but they raise again the awkward point that our panel has chosen to deal only with social science research. When we speak of the Research Coordinator (para 3.18) we mean the co-ordinator only of social science research. Should the Bank then have a second research coordinator, to deal with natural science research? Presumably it should have only a single research coordinator, and we ought to make some appropriate comment to that effect. Similarly, I would assume the Steering Committees we are recommending ought, in appropriate cases (e.g. agriculture), to deal with both natural and social science research, and we should cover the point in some appropriate way.

10. Chapter IV seems to me to be in quite good shape. The only comment I have relates to the last paragraph (4.23), which seems to me to approach grudgingly a task the Bank should welcome happily - that is, the task of helping member countries apply new techniques and train local staff in their use. It seems to me this is a task exactly suited to the EDI, and I suggest that we say so, in para 4.23.

11. Finally, I think Chapter V needs considerable work, primarily of an editorial nature. As it stands, it seems to me neither clear nor persuasive. I attach, (as annex 2 to this memorandum), a possible revision.

I look forward to receiving the next draft of the report, and to seeing you in June.

DEB/am
Attachments

1.05 The Panel has had some difficulty obtaining a complete picture of the Bank's contributions to research on development. This is in part because the Bank's activities are naturally diverse; the Bank is involved through its projects, its policy advice, and otherwise, in seeking to apply what is known and what is being learned about the entire complex, sprawling subject called "development." Our difficulty also stems in part, in our opinion, from the fact that the Bank has become increasingly involved in research over the past decade in a variety of ways and from several different sources of initiative, without bringing the whole picture together in any publication or organizational unit. At present, we find the Bank's contribution to research breaks into at least five parts:

(i) Research funded in part from the central research budget (called, confusingly, the "External Research Budget") and controlled by the Research Committee, amounting in Fiscal Year 1977 (including the value of staff time) to about \$5.6 million;

(ii) Research financed from departmental budgets and not subject to centralized review, amounting in FY 1977 to about \$1.4 million;

(iii) The Bank's contribution to certain organized programs of international collaborative research, primarily in the fields of agricultural and tropical diseases, amounting in FY 1977 to about _____ million;

(iv) Research financed by member countries under loans and credits from the Bank, for which accurate data have not been assembled, but a responsible estimate suggests may in recent years have amounted to \$30-40 million per year.

(v) The Bank's contribution to building up research capacity in developing countries, both through loans and credits for that purpose, (perhaps _____ million

(Annex 1 of Bell memo to Lewis)

in FY 1977, most of it for agricultural research capacity), and (here the figures overlap with items i and ii above) through collaborative research activities between the Bank and research institutions in developing countries (about _____ million in FY 1977).

1.06 Several comments should be made about these categories. First, the Bank as an operating organization is primarily concerned with applied research, both in its own staff work and by its member countries. As in any such situation, the line between research and its application is inevitably uncertain. For example, the preceding paragraph does not account for some of the work undertaken in the Bank's regular program of economic and sector analysis, which could as well be called applied research. We are not troubled by this lack of precision in accounting, and have not tried to pursue unduly fine distinctions.

1.07 Second, while the Bank has funded both technological research and socio-economic research, most members of this Panel have felt competent to offer advice only in the latter field. We have accordingly limited our deliberations to the Bank's activities in the area of social science research, particularly research in economics. We believe technological research is important, and we believe particularly that technological and socio-economic research often can be mutually reinforcing in very important ways - as they are, for example, in the international agricultural research centers. Accordingly, we consider that our report is incomplete as a basis for decision by the Bank's management on Bank research activities, and suggest that a

(Annex 1 of Bell memo to Lewis)

further panel (or panels), focussing more on the technological side, might be helpful.

1.08 Third, the deliberations of our Panel have been conducted exclusively in Washington. The membership of the Panel has included persons with extensive experience of research and its applications in developing countries, but we have not visited such countries in the course of our work, and therefore lack information on how the Bank's research activities are seen by government officials and research leaders in member countries. While we have made a number of suggestions about ways to make the Bank's research results more useful to member countries, and about ways in which the Bank can contribute more to enlarging research capacity in member countries, we are conscious of the limited basis of information on which we based these suggestions. We believe that these are areas which should be pursued further in appropriate ways.

Chapter V

Size and Priorities

5.01 In this chapter we address the questions of how large the Bank's budget for social science research should be, and of what fields or types of social science research should be given priority.

5.02 We begin with the observation that the development process in most of its aspects is still poorly understood, and that social science research can help substantially to increase the world's knowledge about obstacles to development and how to overcome them. Considering the urgency of dealing more effectively with the stubborn problems of poverty, hunger, unemployment, and ill-health in the world's developing countries, we consider that more research aimed at these issues is strongly warranted.

5.03 How much should the Bank do? There are many other groups and organizations that are able to contribute to the needed research. Plainly the Bank should think of itself as playing a limited role. But at the same time, the Bank has the ability to select its own research objectives without being hampered by political constraints. And the Bank is able to mobilize the best resources, wherever they may be found, to conduct the research it undertakes.

5.04 There is thus a prima facie case for additional Bank-financed social science research on development: the need for such research is urgent and the Bank is well-equipped to undertake it. Before reaching a firm conclusion, however, we looked at several further questions.

5.05 First was the test of performance. Has the Bank's research been of high quality? This question was addressed by the specialized research panels, on whose judgment we mainly rely. They were reviewing the results of over one hundred studies, so they found a mixture of good and bad. One can only ask how this mixture compares with results in other research institutions. The answer is that Bank research is of the highest quality. In a number of fields the Bank is the leader, and in all its work it is highly respected.

5.06 Second was the test of utility. Has the Bank's research been useful? In part, the answer is clear. The results of Bank research are plainly contributing to the Bank's analytical work, and that of member countries, in such fields as foreign trade, unemployment, and sector programming. The use of research results in project design is not so obvious. There are some good examples: the Bank's projects in transportation and in public utilities would not be the same but for the results of Bank research. In some other sectors (education, population, small scale industry) research is still in early stages. But it remains true that the Bank's comparative advantage in project-related research has not been fully exploited, and we have proposed measures to remedy this.

5.07 Third was the test of feasibility. Can the Bank manage well an increased amount of research? We have expressed some doubts about the current administrative arrangements, which produce too much fragmentation, but in our view these defects are easily remediable. The program is not in sight of becoming too large to manage. On the contrary, in some fields of study the number of researchers may be below the critical minimum. We have also expressed concern that not enough attention is being

given to disseminating research results both within the Bank and in developing countries. We do recommend that high priority be given to the measures for improving research application and dissemination outlined in Chapter IV, but we do not believe the resources needed for this purpose preclude an increase in research activity.

5.08 In summary, then, we find the Bank's research record to be good in terms of quality and usefulness, and an increase in Bank research seems both desirable and feasible. By how much should Bank research be increased? There is no way to choose a precise number that is demonstrably superior. In our judgment, having regard to the importance of maintaining high quality and the time needed to plan solid research projects and recruit excellent staff, it might be sensible for the Bank to increase its funding for social science research on the order of five percent per year (in real terms) over the next several years. Another review like the present one might be commissioned in about five years to make recommendations for the subsequent period.

5.09 In addition to increasing the funds directed to research proper, we have also proposed increasing the funds devoted to collaboration, application, and dissemination activities. Moreover, we have recommended other staff increases for purposes connected with research: for staffing the Office of the Research Coordinator, and for adding small research liaison units in the regional offices. Finally, we have recommended increased readiness by the Bank to finance, through loans and credits, enlargement of research capacity in developing countries; the addition of research training to the program of the Economic Development Institute; and the establishment in the Bank of postdoctoral research fellowships or their equivalent as a contribution

to the building of research competence in developing countries.

5.10 These recommendations make quite a long list, but their total cost would be very small indeed in relation to the volume of loans and credits the Bank approves each year. And the potential value, to both the Bank and the member countries, of well-chosen research activities, in our opinion would be many times the costs incurred.

5.11 (Here the draft would move on to address the subject of priorities within the research program.)

DATA COLLECTION AND DISSEMINATION

3.03. Before taking up research itself we should spend a moment with the subject of data collection, which is its pre-requisite.

3.04. The situation in this regard is somewhat paradoxical. On the one hand we are continually told that the absence of suitable data is a major constraint on empirical research. On the other hand there is evidence that in some countries large and valuable data sets already exist and languish in neglect with their analytical potential only barely exploited. In particular we regard the payoff to a more systematic effort at documenting, archiving and disseminating survey data sets as potentially high and even in some cases as more important than that of undertaking new household surveys. One by-product of any comprehensive documentation would be to identify particular countries and topics where second round surveying would be most fruitful in establishing the evolution of processes over time.

The Bank itself should recognize that data sets are important output of its research effort. Our impression is that there are currently only ad hoc arrangements for documentation and retrieval of this material. We therefore recommend that the Bank establish the necessary in-house capability in the specialist functions that statistical expertise and data management involve.

3.05. About the Bank needs for data, a distinction should be drawn between its needs for country specific information using country concepts and definitions, and its need for internationally comparable data series. As the Bank itself has come to realize the two needs are not easily met in the same fashion or from the same sources, nor do they necessarily have equal utility in all contexts. Country specific data, rather obviously, are most useful in the conduct of country policy dialogue, while internationally comparable data are of importance in commentary on world trends, assessment of development progress and for presentation in such documents as the World Development Report.

In both cases, however, the bulk of the data will come from the national statistical offices or from country wide data systems. The Bank should particularly appreciate that vigorous efforts be made to upgrade the capability of these offices and the quality of these systems. But direct responsibility for such efforts has to be assumed primarily by the countries themselves with the help of the UN Statistical Office.

The contribution of the Bank has to be geared either to specific data collection needed for some of its lending operations or to specific topics for which it feels a particularly urgent need.

3.06. A major area where there may be a role for the Bank to play was identified by the RAPIDE panel : that of income distribution and employment. The panel recommended that considerably greater initiative and expenditure be devoted by the Bank to assure collection and dissemination of reliable, consistent and continuous data in this area. We carefully examined this recommendation.

We were conscious that the aim was not to collect and disseminate data on income per se, which in rural poor communities is even difficult to define, but data on conditions of living. Household surveys provide the proper way of investigation. But setting up suitable surveys, analysing their results and using them for evaluating changes through time in conditions of living is a major operation which, even in the statistically developed countries, still raises a number of problems. The Bank should not expect quick return from its efforts in this area ; in particular a long period will be required before any conclusive inference can be drawn from survey data as to the aggregate distributional impact of Bank lending.

A better knowledge of conditions of living within any country is, however, an important element of social and cultural development of the country. Hence, the Bank would be justified in promoting it by whatever means are at its disposal. We recommend that this question be studied by a meeting of a few specialists who would have to answer essentially three

questions : (i) Should the Bank directly promote collection and dissemination of statistical data on conditions of living ? (ii) If so, should the staff of the Bank and/or some external organization commissioned by the Bank be in charge of leading this effort ? (iii) How should a program in this area be organized from a few pilot surveys to more systematic operations in which international comparability would be striven for ?

3.06. The Bank has been assigned official responsibility within the UN family for data on the debt of developing countries and it has moved to discharge this obligation conscientiously. The maintenance of such capacity is an expensive business ; but, as far as we could judge, it is a precondition for a good information of lenders, hence finally for a good access of LDC's to international loans.

In addition the Bank has become a disseminator of cross-country data qua data, via documents such as the World Bank Atlas, the recent 'Atlas of the Child', and the superb "World Development Indicators" appended to the "World Development Report, 1978". For better or worse, the Bank's flair for preparation of such compilations, coupled with the formidable efficiency of its public relations machinery has resulted in these documents becoming standard reference sources for those interested in development. Such a role as propagator imposes further responsibilities on the Bank for accuracy, consistency and comparability. We therefore feel that the Bank ought to be more selective in its reporting of data and should not give its authority to numbers of doubtful conceptual validity and statistical reliability. Again, this requires development of statistical expertise within Bank's staff.

