Research Policy: Eleven Issues

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Outline Statement to the Board of Governors
of the International Development Research Centre
at their meeting in Bogota, Colombia
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INTRODUCTION

This meeting of the Board closes the first phase of Centre development. The annual meeting in September will bring six new governors to our assembly and a new Chairman to our leadership. In a sense, this is the last meeting of those who have guided the Centre from its inception to its present fulfilment. This being so, I am taking the opportunity to reflect upon what has been accomplished and what lies ahead.

My statement draws heavily upon the program content of my inaugural message of October 1970. This content is still the major guideline for Centre endeavours. I think it has stood the test of the past 30 months and I believe it should remain the basic policy frame in the future. However, both the main thrust of policy and the implications of its implementation should be subject to periodic scrutiny by the Board. This is the responsibility I set before you today.

I have prepared this statement more as an aide-memoire than as a comprehensive review. I have posed the policy issues touched on as two ends of a continuum. Obviously, as with all policy, between the two extremes it is necessary to find a band or balance or blend that best accomplishes our purposes and it is the search for this balance that should guide our dialogue.

BASIC REFERENCE POINT

I want to begin by restating our purposes, as set forth in the Act of Establishment. These are:

"...to initiate, encourage, support and conduct research into the problems of the developing regions of the world and into the means of applying and adapting scientific, technical and other knowledge to the economic and social advancement of those regions, and, in carrying out those objects

(a) to enlist the talents of natural and social scientists and technologists of Canada and other countries;
(b) to assist the developing regions to build up the research capabilities, the innovative skills and the institutions required to solve their problems;
(c) to encourage generally the co-ordination of international development research; and
(d) to foster co-operation in research on development problems between the developed and developing regions for their mutual benefit."

I repeat them because they are, and will be, the basic reference for all Centre executive decisions.

Of the broad overall statement of purpose, the Centre has focused its efforts on the encouragement and support of research into the problems of developing regions. It has limited itself to science and technology, and has maintained a strong orientation to assisting research that has a practical, or an applied, significance for the economic and social advancement of developing nations.

The Centre has so far given major emphasis to the enabling clauses (a) and (b) of its objectives.

It has recruited an international staff and has sought throughout the world for the professional expertise and competence required by its programs.

Clause (b) has been given a particular pride of place. In major measure, Centre support has focused on building the research skills of scientists and technologists in the developing countries. The Centre has sought to provide indigenous research workers with expanded opportunities to build their personal skills and to contribute to the solution of development problems besetting their own societies.

Clauses (c) and (d) of our objectives have not been as vigorously pursued as clauses (a) and (b). There are projects that have been assisted by the Centre which forge partnerships between centres in Canada and others in low-income nations; and Centre staff are continuously working with other donor agencies and with recipients in the developing countries to effect a better coordination of the flow of research support and a sharper focus of combined research endeavours. But Centre accomplishments in attaining these objectives have been reached more by ad hoc serendipity than by purposive design. I hope to be able to report to subsequent Board meetings substantially greater progress in attaining these objectives.
SUPPORT FOR LOCAL SCIENTISTS

From the Centre's experience over 30 months of operations, several policy issues have emerged which appear worthy of your attention. It is to these that I now turn.

The first four policy issues are closely interlinked; they are separated only for purposes of elaboration.

Policy Issue 1: The balance between Centre support for research workers indigenous to the developing regions, and support for Western scholars and scientists from developed countries.

Centre Practice

(a) The Centre has focused support on indigenous LDC scientists within the framework of assistance to specified projects.

(b) The Centre has involved few Western scientists in its program assistance. Such involvement occurs usually only if there is a clear comparative advantage in doing so; if the recipient institution requests such an involvement because of an obvious gap in available local skills; or if there is evident advantage in building a partnership between the recipient institution and a Western source of expertise.

Centre Experience

Scientists in developing countries, after some suspicion and much doubt as to the true willingness of the Centre to provide virtually untied assistance, have welcomed Centre support for their work. They have particularly welcomed the confidence implied by the Centre's support in their ability to undertake important research on local problems without the supervision or assistance of external specialists.

Policy Issue 2: The balance between Centre acceptance of, and support for, research projects focused on problems as perceived, given priority and defined by scientists, policy makers and administrators in the developing countries, and the exercise of Centre judgement about the "proper" research priorities and problems in developing countries, coupled with a channelling of support for development research objectives enunciated by the Centre.
Centre Practice

(a) The Centre has given very strong emphasis to permitting research scientists and others to set their own priorities and to determine their own research problems. Dialogue does take place between the Centre and the concerned recipient, but the dialogue focuses more on details of the research activity, and relatively little on its broad objectives. If the objectives do not accord with current broad Centre concerns, the research project is not recommended.

(b) Only if the Centre is invited specifically to assist in the determination of priorities does the Centre respond with positive support through a Program Activity Project; and only then, if the recipient is prepared to take full responsibility for the administration of the activity involved and for the outcome.

(c) Centre Program Project support for research activity in developing countries follows only if it is clear that the recipient places a high priority on the purposes of the research.

(d) The Centre has been responsive tc inquiries from developing countries and has encouraged innovative departures from the usual run of research activities when such departures have arisen from local initiatives. The Centre has sought to avoid setting forth a catalogue of IDRC determined research needs despite pressure from sources in both developing and developed countries to do so.

Centre Experience

(a) Most recipients have welcomed the Centre's emphasis on providing support for locally determined research needs.

(b) Some developing countries, however, have great difficulty in setting priorities. There is an evident desire to have the Centre be more assertive in indicating what it thinks should command the attention of local scientists as priority issues. The expectation is that such an indication will be followed with Centre research assistance.
(c) An objective assessment of the purposes behind projects supported by the Centre would reveal relatively few that are focused on trivial problems. There are some, however, that have objectives whose real significance can be questioned if one sees the research results as the main purpose of the project; or views the project in terms of a short-term finding; or from the standpoint of its immediate contribution to accelerating the pace of national development.

**Policy Issue 3:** The balance between Centre assistance for improving the innovative research skills of LDC research scientists and technologists by providing “on the job” research opportunities, and Centre assistance to the finding of solid research results that are of the quality most useful for guiding or furthering the process of development.

**Centre Practice**

(a) The Centre has tried to find a balance in a wide band around the mid-point between the improvement of human skills through the conduct of research and the production of a quality research product. In doing so, and because of the Centre’s stand on Policy Issues 1 and 2, the balance struck in each case varies, depending on the capacity of the scientists involved to produce high quality work that will be recognized internationally. Where the recipient scientists are well trained and experienced, project standards, the methodology used, and the quality expected is high. Where recipient scientists are not highly trained or experienced, the project expectations, its content, and its methodology are lowered or simplified accordingly. The result is that the Centre has given support for endeavours that often seek to develop future research workers from among today’s potential human talent at the opportunity cost of weaker research results than would have been available if the Centre had supported only top-flight scientists, or insisted on including in its projects external technical assistance to offset local deficiencies.
(b) Because the Centre has not striven to support only research that will meet some externally agreed upon standard (now referred to among donors as “international standard” research), the Centre has often supported scientists who would not qualify for assistance from other agencies. Such support has been justified as meeting objective (b) of the IDRC Act — the building of human skills.

(c) On occasions the Centre has sought to offset some of the possible reduction in the comprehensive quality of research results by developing projects that embrace several research institutions in different countries of a geographic region. Under this arrangement, each institution undertakes a complete study on its own that is paralleled by the work of each of the others. The Centre then brings together the researchers involved at regular intervals during the course of the work to share experiences, to reinforce the momentum of the project, and to permit the relative strengths and weaknesses of each to be complemented by the other members of the group in a way that enhances the capacity of them all.

(d) The overall balance of Centre support between training and research discovery is struck also by channelling some Centre assistance to places of research excellence, such as the international agricultural research institutes, the major scientific centres in the more developed of the developing countries, and, in small measure, to institutions in developed countries.

Centre Experience

(a) There is little doubt that the Centre has traded some project quality to permit support for the earlier phases of research training. It is a gamble through the time-dimension of development. In certain instances an investment in research training will not have the same short-run potential payoff that superior quality research could have; but, in the long run, the developing countries must have their own skilled scientists. The Centre is one source of investment to help meet this goal.
(b) The willingness of the Centre to invest in research training by letting scholars in developing countries undertake their own work has risks that appear to be more than offset by the evident excitement the policy has generated among potential and actual recipients. The Centre is unique among world donors in holding this stand as a central policy thesis — indeed, as one of its specific foundation mandates.

(c) Centre research networks have proven to be an extraordinarily successful tool for organizing, mobilizing and giving experience to researchers in developing countries. The financial and human costs of administering such networks, however, is not small. Nevertheless, it may well be that Centre investments in research networks, despite their administrative difficulties, will prove to be among those of our endeavours to earn the highest return.

(d) It is easy for sophisticated scholars to discount the value of unsophisticated research. Yet the lessons of even the short period of the Centre's operation seem to suggest that local research done by local research workers, however unsophisticated it may appear to an outsider, carries with it the rightful pride of its author and the capacity to command the close attention of colleagues and national officials. There is an increasing tendency in developing countries to want their research done by national researchers. In many cases local officials are suspicious of, even hostile to, "foreign" research findings. This suspicion can sometimes be traced to the inappropriate application of sophisticated analytical techniques to unsophisticated problems; or, at least, to the lack of translation of the high-level findings to a practical course of recommended action.

**Policy Issue 4:** The balance in Centre support between problem-oriented or applied research, and assistance for phenomenon-oriented or basic research.

**Centre Practice**

The Centre has provided very little support for
academic, descriptive, or basic research activities. The emphasis in Centre projects has been on the quest for direct solutions to specific development problems.

Centre Experience

(a) The applied or problem focus of Centre support has proven immensely valuable in choosing among projects and in encouraging research scientists in developing countries to focus on critical questions constraining the development of their societies.

(b) There are practical problems, however, that appear to hold little promise of yielding to applied research solutions. More work will be needed in the basic chemical aspects of the human reproductive cycle, before radically new contraceptive devices can be developed. The biological mechanisms of drought resistance, and the plant biochemistry of efficient water utilization during photosynthesis, are two areas of basic research that must be undertaken if significant yield advances are to be made in the semi-arid cereal crops. The cultural, psychological, economic, social and biological components of human fertility must be more fully explored if a better understanding of population dynamics is to be available for the development of population policies. These are but three examples among many that call for phenomenon-oriented research. All are directly related to Centre-applied concerns. They are not yet fully on the Centre’s research agenda.

(c) Most basic research cannot now be undertaken successfully in the developing countries. The absence of strong institutional infrastructures, the shortage of experienced research workers, the urgency for finding solutions to immediate local problems and the need to allocate scarce national talent to these problems are but a few of the difficulties to be overcome. Some examination, therefore, must be made of how much Centre support should be allotted to basic research, in what fields, and at what institutions.
These four issues tie together as various facets of a single question. There are also several other aspects of Centre policy that need enumerating. In one sense they do not cluster together as easily as those above; in another sense they are part of the same structure.

**Policy Issue 5:** The balance between institution building, research training, and research support.

**Centre Practice**

The Centre has not directly supported institution building, leaving it to the larger aid agencies such as the Canadian International Development Agency and the World Bank. It does provide some institutional support through its projects, but to date Centre resources have flowed only sparingly to institutional investments.

**Centre Experience**

In many countries the major impediment to research for development is the lack of an institutional base. The costs of building institutions are high; and, in standing aside from this type of investment, the IDRC has been limited to working with existing centres. This has not yet proved to be a limitation, but it could become one if the Board were to move in program directions not covered by an existing institutional base.

**Policy Issue 6:** The balance between project support and assistance to core, or general administrative, costs.

**Centre Practice**

The Centre rarely provides "core" support for an institution; it does, however, provide such support for research networks and, occasionally, for research associations.

**Centre Experience**

Until now, the restriction on core assistance seems to have been a prudent practice. However, it is likely that, in the months ahead, there will need to be some relaxation in the rule and the balance shifted to include core assistance for unusual initiatives in both developing and developed countries that promise pro-
ductive new approaches to the organization and conduct of development research.

**Policy Issue 7:** The balance between Centre support for research projects and direct support for post-secondary or post-graduate training.

**Centre Practice**

Centre assistance for the formal training of scientists in developing countries has been confined to the framework of a research proposal. The Centre has no programs of scholarships or other formal training assistance at any educational level.

**Centre Experience**

As a whole, Asia and Latin America seem reasonably well endowed with trained scientific talent. Africa is not equivalently endowed. There is a major need in Africa for a substantially larger number of post-secondary and post-graduate training scholarships in virtually every field of science. Some of this training can be done in Africa, but much must be undertaken outside the continent. There are good reasons for the Centre to assist in meeting this problem. There are also good reasons for not doing so, not the least among them being the costs involved and the long gestation periods before such a training investment begins to produce any return. But if the Centre is to continue to assist research in Africa, it will shortly be forced to give major attention to the problem of direct training. In Asia and Latin America, Centre work can, for the greater part, rest upon the human capital which other agencies and institutions have built.

**Policy Issue 8:** The balance between Centre support for specific projects and non-specific grant support for research associations and networks in developing countries to permit them to solicit and directly finance research proposals from their region of operation or their membership.

**Centre Practice**

Little Centre support has gone to non-specific research endeavours. For the most part, Centre assis-
tance is granted only for specific projects that are approved by the Board.

Centre Experience

In Asia and Latin America there are several established associations of regional scientists. Many of these associations are willing, able and anxious to undertake the preparation, screening and monitoring of projects and to administer the accompanying financial support. There are obvious disadvantages to the Centre in channelling its research assistance to the final recipient through such bodies; but, in certain circumstances, there are also advantages that cannot be dismissed lightly. Among these are: the lessening of Centre administrative costs, the strengthening of regional associations; the transferring of judgement about the choice of topics and the competence of the potential research recipients to a local body from an “outside” donor; and the removal of the stigma of charity and “rich country” arrogance from the grant process. It is probable that in the future the Centre will be allotting modest funds to support the work of regional associations, but I do not expect much more than a slow shift of the balance that is strongly biased in favor of close Board study of each project the Centre assists.

Policy Issue 9: The balance between Centre assistance for analytical research, and support for direct, comprehensive action development projects.

Centre Practice

The Centre has supported only a few action development projects. There are no established criteria for action work except that the project must be innovative and contain a significant component for investigation and evaluation.

Centre Experience

(a) It appears that the Centre’s action projects will prove at least to be useful experiments in the conduct of such projects. It is too early to predict whether they will add significantly to a wider understanding of the processes of development.
It is certain, however, that until a concerted, long-term effort is made to bring together the many parts of the development process into some kind of operative whole, neither past nor future research will find truly fruitful application. Indeed, unless there is a constant concern in the Centre for the practical problems of attaining progress, it is likely that future research assistance will move further and further from the reality it should affect. Without some Centre involvement as partner in action, this Board will seldom be forced to confront the processes we seek to influence. This would imply that the Centre might give more attention to the action or implementation problems of development; that it might seek a more prominent role in mapping the course from research to the translation of research results into public development policy; and from the formulation of these policies to their practical implementation.

Policy Issue 10: The continuation of the Centre's predominant focus on research to improve the well-being of peoples living outside large metropolitan areas.

Centre Practice

(a) This has been the dominant, but not the exclusive, thrust of Centre work.

(b) Research proposals (other than in the Information Sciences) that fall marginally outside this concern are considered carefully and are recommended if they are innovative and appear to offer a high return for the resources involved.

(c) Proposals that fall substantially outside the rural theme are not recommended for Centre finance.

(d) The Centre has financed a few proposals of obvious merit that are focused on metropolitan urban problems, but the Centre neither solicits such proposals nor encourages the pursuit of unsolicited submissions.

Centre Experience

We have hardly begun to scratch the surface of the
total rural development problem. In the past months the Centre has both widened and narrowed its approach to it. The IDRC is now assisting experimental work in regional development planning — a very broad approach involving a necessarily high level of research generality. It is also supporting research on drought resistance — a tightly focused approach to a subject of immense research complexity. Judging from the experience of the past two years, the Centre will continue to find a fertile and productive outlet for its resources within the bounds of its broad rural concern.

Policy Issue 11: The balance between Centre support for research on uniquely national problems, and assistance for research that has global or multicountry implications.

Centre Practice

Only in rare circumstances has Centre support been given for research on uniquely national problems.

Centre Experience

This policy has enabled the Centre to be truly international in its concerns and endeavours. It has generated a wide interest in IDRC activities and has made the Centre equally welcome in the company of international and national agencies working on science, technology and development.

RESUME OF POLICY ISSUES

1. The balance between Centre support for research workers indigenous to the developing regions, and support for Western scholars and scientists from developed countries.
2. The balance between Centre acceptance of and support for research projects focused on problems as perceived, given priority and defined by scientists, policy makers and administrators in the LDC's, and the exercise of Centre judgement about the "proper" LDC research priorities and problems coupled with a channelling of support for Centre enunciated development research objectives.

3. The balance between Centre assistance for improving the innovative research skills of LDC research scientists and technologists by providing "on the job" research opportunities, and Centre assistance to the finding of solid research results that are of the quality most useful for guiding or furthering the process of development.

4. The balance in Centre support between problem-oriented or applied research, and assistance for phenomenon-oriented or basic research.

5. The balance between institution building, research training and research support.

6. The balance between project support and assistance to core or general administrative costs.

7. The balance between Centre support for research projects and direct support for post-secondary or post-graduate training.

8. The balance between Centre support for specific projects and non-specific grant support for LDC research associations and networks to permit them to solicit and directly finance research proposals from their region of operation or their membership.

9. The balance between Centre assistance for analytical research, and support for direct, comprehensive action development projects.

10. The continuation of the Centre's predominant focus on research to improve the well-being of peoples living outside large metropolitan areas.

11. The balance between Centre support for research on uniquely national problems, and assistance for research that has global or multicountry implications.
The International Development Research Centre is a public corporation established by Act of the Canadian Parliament "to initiate, encourage, support and conduct research into the problems of the developing regions of the world and into the means for applying and adapting scientific, technical and other knowledge to the economic and social advancement of those regions, and, in carrying out those objects:

(a) to enlist the talents of natural and social scientists and technologists of Canada and other countries;

(b) to assist the developing regions to build up the research capabilities, the innovative skills and the institutions required to solve their problems;

(c) to encourage generally the co-ordination of international development research; and

(d) to foster co-operation in research on development problems between the developed and developing regions for their mutual benefit."