THE INTRODUCTION OF A PLANNING AND EVALUATION SYSTEM IN IDRC



INTRODUCTION

The mandate given by the President to the Office of the Vice-President, Planning in the fall of 1978, was as follows:

- a) Centre management of all aspects of the operations of Regional Offices, which was a continuation of earlier responsibilities;
- b) The design of the structure and methodology for project and program evaluation;
- c) The preparation of a long-range policy for the Centre involving the preparation of medium-term forecasts for periods not exceeding three years.

In performing the new responsibilities (b) and (c) above, the planning office was expected to develop a very close working relationship with the programs divisions and integrate the regional offices fully in these activities.

A cautious beginning has been made and subsequent sections will describe the current status of the different studies, and mechanisms that have been introduced. Budgetary provision has been made for only two full-time staff members in the current financial year and this has made it necessary to hire outside consultants for much of the work that would normally be handled by full-time staff members. The scale of operations and the amount of funds that the Centre wishes to devote to these activities is an issue that is dealt with in the concluding section.

THE NEED FOR AN EVALUATION SYSTEM

At the present time all program divisions undertake project monitoring in the course of implementation of research projects. This monitoring is a continuous process involving an analysis of the progress and financial reports submitted by the recipient and are often coupled with a project visit. This is generally associated with the release of instalment payments during project implementation and is a means of assessing whether project objectives are efficiently and effectively carried out. Further, a major review of every project is carried out before negotiations are concluded for a second phase. This activity is well established within the Centre, though naturally the emphasis or detail varies from division to division.

Despite this monitoring process, the Centre, as a whole, lacks any kind of systematic institutional memory. This function becomes more important over time as more projects are completed and the experience of program staff is lost when they leave the Centre. Therefore, an evaluation

system is necessary that goes beyond mere project monitoring to enable the Centre to draw lessons from past experience and serve as a guide to future programming. There is also a need to justify to external agencies within the Canadian government structure -- such as the Treasury Board, the Privy Council, and the Auditor Generals' Department -- that Centre funds are being used economically and effectively. The need for an effective evaluation system has been highlighted in the inter-departmental discussions held over the past several months, on Canada's ODA Strategy Review.

It is also hoped that the evaluation unit which has been set up outside the framework of the Program Divisions, though working closely with them, will provide the President's Office with guidance on major policy issues affecting the Centre.

OUTLINE OF THE SYSTEM

The basic activity in the system is a Project Completion Report (PCR) that is now required at the end of each project activity financed by the Centre. This was introduced at the beginning of 1979 and guidelines were issued (see Annex 1) to the Divisions to assist in the preparation of these reports. After we have analyzed the experience gained from an adequate sample, the guidelines will be revised, probably in early 1980.

The next step in the system is in-depth evaluations of selected projects and program areas. Such evaluations will be undertaken in response to requests from the Board, from the President and Management Committee following an examination of project completion reports, from the divisions for their programming needs and for the long-term planning needs of the Centre.

Related to these in-depth evaluations on projects and programs areas would be 'stripe' or policy analysis undertaken by the unit on a variety of issues such as training, the effectiveness of research networks, etc., which are of multi-divisional and Centre-wide interest.

It is anticipated that these evaluations and policy studies, conducted and organized at different levels within the Centre, will feed into the three year planning process, enabling the President and Management Committee to make recommendations to the Board on priorities to be assigned to program areas for funding and thereby lead to a more selective approach for budgetary allocations than in the past. This process should make it possible to avoid across-the-board increases in budgetary allocations for all Program Divisions.

EVALUATION METHODOLOGY

There is as yet no accepted quantitative system for evaluating research projects, although there have been an increasing number of experimental models. In view of this, the planning and evaluation unit will be experimenting with different approaches in the evaluations that are being undertaken.

One recognizes that any attempt to quantify the ultimate costs and benefits of any research activity is obviously going to be difficult to develop. The real effects of any research program may be very long run or indirect. Further, the results are likely to be mixed, including both negative and positive factors. For example, a new crop may raise the average level of rural income but result in increased disparities in income levels between groups over a period of time. A project may have beneficial effects on the development of new knowledge, on the attitude of scientific staff and their level of skills, although failing to achieve specific technological objectives.

IDRC often funds only a portion of the total costs of a research program. It is therefore difficult to assess the impact of only IDRC's contribution, when the real benefit of any project should be measured against total research expenditures.

There is another important aspect of evaluations that needs to be examined. Consideration should be given to building in recipient or joint recipient/IDRC evaluations into the original design of IDRC-supported research programs. At present few programs incorporate this feature. A thorough assessment of the results of a project by the recipient institution can be a useful tool for improving the management capability and effectiveness of these institutions in undertaking research programs, as well as being of use to IDRC in its programming activities.

The planning and evaluation unit is examining the policies and practices of other donor and research funding agencies during this fiscal year to ensure that IDRC develops the most appropriate methodology for evaluation. It is proposed to hold a workshop early in the next fiscal year on evaluation methodology, by inviting experts in this field to participate and comment on our work.

The methodology that is being developed and used as guidelines for Project Completion Reports could be grouped under four broad headings. These are the technical achievements of the project or program; the development of personnel and institutional capability; IDRC's role and involvement; and the ultimate impact of the project. In analyzing project achievements, the results will be compared with the stated objectives;

whether the objectives were realistic and whether they were changed during implementation of the project. An examination will be made of the effectiveness of project management, whether the methodology was suitably defined and efficiently carried out, and whether the funds provided for the project were efficiently used and justified in terms of the project's requirements.

In assessing IDRC's role and involvement, an attempt will be made to obtain the recipient institution's perception of the value of IDRC's involvement in the project. With this and the program officers comments, one would hope to obtain an indication of what IDRC policies and regulations need to be reviewed and changed.

The assessment of impact is perhaps the most difficult, as the full implications of a project would be felt only over a long period of time. For example, one needs to make a judgement on what the project has contributed to enhance the scientific and management capabilities of the. staff in the recipient institutions and whether the project has resulted in the institution changing its research focus or enhancing its role within the national research system. It is also necessary to examine whether the project strengthened linkages with other research institutions, both within the country and internationally, and with agencies responsible for delivery systems. An important aspect of the assessment must be the involvement of the beneficiary or the target group. The development implications will be affected by any increase in the government's commitment towards the research activity, the anticipated impact of the results in the country and what policy changes, if any, could be related to the project. It is also necessary to examine the possibility of replication of this activity, both within the country and outside.

As one can see in the objectives listed in Annex 2 of the evaluations undertaken to date, these general guidelines have been adapted to meet the particular needs of each study. It is necessary to recognize that they are experimental and will be modified as experience is gained. An important aspect of evaluations is the choice of appropriate groups of persons who would undertake these studies. A representative from a developing country or a person with considerable developing country experience would be essential. At the same time, it is important to have an input from the regional offices, as well as a person with technical expertise in the field and an IDRC staff member familiar with the Centre's mandate and interests. These evaluations are not being proposed as audits of the recipient institutions and their full participation in these studies is being requested. It has been possible to keep the numbers of the evaluation team down to 2 to 3, as the individuals selected each satisfy more than one of the above requirements.

PROJECT COMPLETION REPORTS

As the first step towards introducing a Centre-wide mechanism for project evaluation, a system of Project Completion Reports was introduced in January 1979 for those activities which were completed during the second half of 1978.

Before guidelines for Project Completion Reports were issued, the systems adopted by the Rockefeller and Ford Foundations were studied. Whilst the Rockefeller Foundation adopted a detailed system which was oriented towards computerizing the reports, the Ford Foundation system sought answers to three basic questions:

- a) Was it a worthwhile project?
- b) What have we learned from it?
- c) Will we do it again?

The Ford Foundation permits Program Officers responsible for the activity considerable flexibility in writing the reports and they document what they consider important within these broad guidelines. The approach adopted in IDRC was to lay down comprehensive guidelines as outlined in Annex 1 and permit program officers flexibility within these guidelines to report on what was relevant to the project. The purpose of adopting detailed guidelines was to highlight issues which are important for planning purposes which may otherwise not be commented on if general guidelines of the type adopted by the Ford Foundation were used.

The response to date has been disappointing, with the reports ranging from a one page document which is more in the nature of an action minute to close a project file to a very detailed report which took the program officer nearly 15 days to complete. It is yet too early to draw any firm conclusions about the acceptance of the system within IDRC but it is our expectation that the guidelines will be simplified and be perhaps limited to the project results and an overall assessment, with the more detailed guidelines used on a selective basis to be decided on between the planning office and the program division concerned.

IN-DEPTH EVALUATIONS

The next stage in the evaluation system is the in-depth evaluation of projects and programs arising from requests from different sources.

First, the Board may request an assessment such as the review on Contraceptive Technology Development which will be presented to the Board in April 1980.

Second, the Divisions would need them for divisional planning purposes such as the evaluations of the Science and Technology Workshop Program at Sussex University, the Remote Sensing Program and the Latin American Research Program on Human Reproduction. The report of the last evaluation has been submitted to the Board with the observations of the Planning Office. There are other projects and programs such as Technonet Asia which is nearing the end of its second phase and the Rural Health Care Delivery Program in Asia on which preliminary discussions about evaluations have been held.

Third, evaluation activities would be undertaken in response to planning needs and these will be defined in consultation with the program division concerned.

Fourth, the Management Committee may request project or program evaluations. It is possible that some guidelines will be adopted in the future that will provide for the automatic evaluation of projects which involve IDRC expenditure of, say, more than one million dollars in the various phases of a project.

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The Planning Office will work closely with the program divisions in defining these evaluations, drawing up the terms of reference and identifying the consultants. The ability of the planning staff to get involved in more than three to four evaluations each year is dictated by the size of the budget devoted to evaluation activities by the Centre. The costs of these evaluations will be borne by OVPP in order to provide a closer monitoring and control on total expenditures used for this function.

It is foreseen that a minimum of 10% of completed activities will be evaluated each year, which at the present rate of project completion would amount to six to ten projects each year.

The objectives of the evaluations of the Remote Sensing Program, the Science and Technology Workshop Program and the Latin American Research Program for Human Reproduction are given in annexes 2 a, b, and c.

Five projects have been financed under the Remote Sensing Program; in Sudan, Bolivia, Mali, Tanzania and Bangladesh with grants totalling \$681,100. This evaluation is being undertaken by a consultant from the Canadian Centre for Remote Sensing, IDRC's former Regional Director in East Africa and the Assistant Regional Director of the Latin America office. They are making an assessment of the success of these projects, as well as of the experience gained in transferring a high technology activity to countries mostly classified as least developed by the UN.

The Science and Technology Workshop Program will be evaluated by the Chief Technical Advisor of the National Planning Agency of Jamaica

and the former Director of the Science and Technology Policy Research Unit at Ife in Nigeria. Both consultants have teaching and research experience in this subject area. This activity has been conducted entirely at Sussex University in England at a budgeted cost of \$464,000. The evaluation will focus on the academic merit of the course content, the cost effectiveness of undertaking this program at a developed country institution such as Sussex University. An assessment will be made on whether this program has any lessons for IDRC in undertaking similar training activities in other fields.

The evaluation of the Latin American Program of Human Reproduction, for which IDRC allocated \$830,000 in two phases with a matching contribution from the Ford Foundation, focussed on the mechanism used for channelling funds through a Latin American organization and on the project objectives of increasing the quantity and quality of research in reproductive biology by young scientists in the region. Details of the findings are contained in the evaluation report and covering memorandum submitted to the Board.

POLICY STUDIES

The policy studies or 'stripe' analysis referred to in the introductory sections are evaluations which are non-project or non-division specific. They are designed to provide a comprehensive review of issues or topics which affects the Centre's overall performance and policies. After discussions with the Management Committee and several other staff members, three policy studies have been identified for immediate action. These are:

- a) Appropriate policies towards the least developed countries, with special reference to Africa;
- b) IDRC support for training;
- c) The development of research networks.

The terms of reference of these studies are contained in Annex 3 a, b, and c.

In addition to these studies the Regional Offices in Singapore and Bogota are preparing policy papers on topping up of salaries for researchers in their respective regions.

At a later date, it is hoped to study the effectiveness of international organizations in building up national research capabilities, with particular emphasis on institutions which have received substantial

Centre support in the past, such as the Asian Institute of Technology (AIT) and the Southeast Asian Regional Centre for Graduate Study and Research in Agriculture (SEARCA). In addition, a study will also be made of the types of recipients supported by IDRC in the Third World such as universities, private institutions, government agencies and their effectiveness in building up the national research systems.

PLANNING PROCESS

The introduction of a planning process within IDRC has presented greater difficulties than that of introducing an evaluation system. It is quite unlike a planning system for the national economy or even a private firm. No reliable methodology has been developed to determine the returns on investment in research or the appropriate level of research by either the public or private sector. While there is conclusive evidence that research is an important source of growth and development, there is no direct relationship between the growth rates of the national economy and expenditures on research.

A research-supporting agency such as IDRC is even less likely to be able to develop an a priori system for deciding how much, where and how to allocate resources to development of research capability in developing countries. We are a responsive agency providing funds and technical assistance for projects in which there is often a trade-off between different objectives such as the achievement of technical results and the development of scientific capability and institutional development. Some high-risk projects are deliberately accepted with the understanding that there is little likelihood of any useful results. The level of support justified and the ultimate impact of IDRC support depends greatly on the ongoing and future actions of other donor agencies and more important, the developing countries themselves.

Another difficulty faced by the Centre in planning is the lack of any firm indication of the expected growth in grant levels. The erratic growth in the grant in the last five years has inhibited an orderly planning process. It has even made the programming on an annual basis difficult as the grant level has been subject to change during the course of some financial years.

From the perspective of the Canadian Treasury Board, they would ideally like to see the planning process in IDRC lead to the development of a program budget, staff and policies which would provide the maximum benefit per dollar expenditure with a cost benefit ratio at least as high as other forms of ODA support or even total government expenditure. This would require a "bottom-up" process where we would determine the most effective kinds of program support, the level of expenditure and staff required to achieve IDRC's objectives as laid out in its Act of Incorporation. We would have to start with each developing country's research priorities, the resources devoted to these priorities and the relative potential payoff

from augmenting these resources for each priority. We could then decide how much we allocate to each sector, to the poorest countries and determine how much each research program needs per region, how much each division program needs and thereby each division. One would then determine how much funds and staff the Centre as a whole needs.

It is obvious that any such formal, zero-based process would be rigid, cumbersome and unproductive. Three particular problems with this approach might be singled out. It would reduce the responsive nature of the Centre. Second, it does not take account of the existing IDRC structure and the particular strengths of existing program staff - a highly professional group with specialized skills and experience. Third, as already stated, our knowledge of what are the most productive programs and policies or the most appropriate levels of support is uncertain.

IDRC already has established a system which is highly effective in some ways and we must continue to pursue what we think are good programs. We must not achieve paralysis by analysis. Thus our proposal for establishing this Centre-wide planning process is more modest, flexible and, we believe, more productive. It is designed to reduce or eliminate the three main objections outlined above.

The policy studies discussed in the preceding section are designed to reduce the level of uncertainty in the Centre's forward planning while the planning system will build on the Centre's existing strengths. The Centre's policy of responsiveness to Third World priorities and research requirements is tempered by the existence of the four program divisions and existing professional staff. The Centre has usually been prepared to support only certain activities and within these areas to refine research projects through a dialogue before approval. Developing countries are increasingly defining their own research priorities which allows the Centre to plan its own program of support over a longer period of time.

It has therefore been decided that IDRC will move from an annual Program of Work and Budget to a three year program document. The document will present a specific program for the first year and indicative plans for the following two. While the Annual Program of Work and Budget is, at present, the Centre's only formal planning document, each division operates within a longer term perspective. All divisions have determined certain priority areas for support, have specialized staff in these fields and have at least some project networks which they intend to continue for some years. It is within each program division that specific allocation decisions are made and there the expertise on research priorities and potential lies. Therefore each division will prepare a document outlining a three year program based on financial guidelines issued by the Treasurer's Office.

In preparing the estimates for 1980/81 the Program Divisions have been requested to submit budgets based on two grant levels, one based on nominal growth in dollar terms and the other on a 20% increment over this level. The Divisions were asked to submit proposals for this incremental amount, to enable the President and Management Committee to make proposals to the Board on a selective basis on how additional funds, if made available, would be utilized. Even if the grant level is reduced below the current year's grant level, it is expected that a selective approach will be adopted in making reductions.

This year the budget preparation and forward planning exercise have been separated due to delay in introducing the planning process. However, from 1980 onwards, the preparation of the detailed annual budget for 1981/82 and the indicative plan for the two succeeding years will be part of the same process.

In the three year program it is hoped to integrate divisional priorities and proposed growth patterns with the particular needs of each region through an input from regional offices. This input is essential to ensure a bottom-up perspective in this three year forecast. They will in the first instance disaggregate the three year program on a regional basis and identify new program areas or policy studies that should be undertaken which are relevant to each region. These would of course not be reflected in the three year program until such studies have been undertaken and Centre management has made decisions on them.

Thus the planning document will incorporate the present process of allocation between divisions and between division programs. It will probably increasingly incorporate proposed allocations by regions and to special groups such as the Least Developed Countries. Special emphasis would be given to new Centre initiatives or programs and how they met Centre objectives. The first three year's program will be presented to the Board in April 1980.

SCALE AND COST

The approved budget for planning and evaluation activities in the current financial year is adequate for two full time professionals plus a small amount for PAPs to meet the cost of external consultants.

It has been agreed with the Treasurer's Office that, to the extent possible, the Office of the Vice-President, Planning should bear the costs of all evaluations undertaken by IDRC as they represent a discrete activity to which the Centre wishes to devote a certain proportion of its resources. Financing evaluations from one budget would permit the Centre to monitor and control the total amount of resources used for this activity.

In discussions held with representatives of the Auditor General's Department, they suggested that 1% of the Centre's appropriations budget be allocated for evaluation activities. Several policy studies and evaluations are being undertaken and the planning process is being set in motion and it will certainly assist the planning of these activities if a commitment is made that 1% of the Centre's appropriations budget would be devoted for Planning and Evaluation activities, to pay for both regular staff and external consultants. Without such a commitment, it will be difficult to respond adequately to the demands that are now being made from within the Centre and to function effectively.

Office of the Vice-President, Planning 28 September 1979

ANNEX 1

GUIDELINES FOR PROJECT COMPLETION REPORTS

The questions will be grouped under four broad headings as follows:

- The project
- 2. Impact
- 3. The Centre's role and involvement
- 4. Overall assessment

1. The project

- a) What were the research results compared to the objectives stated in the Project Summary?
- b) Were the original objectives realistic and were they changed during the implementation of the project?
- c) Was the methodology suitably defined and efficiently carried out?
- d) Comment on the effectiveness of project management. Could it have been improved if found unsatisfactory? If so, how?
- e) Were the funds committed by the Centre and recipient institution efficiently used and justified in terms of the project's potential?

2. Impact

- a) Research capability.
 - i) Has the project enhanced the scientific and management capability of the staff of the recipient institution?
 - ii) Has the project had an impact on the institution in changing its research focus or in enhancing its role within the national system?
- b) Linkages.
 - i) Has the project contributed to strengthening linkages with other research institutions, within the country and internationally?
 - ii) Has the project established or strengthened linkages with research institutions and non-research agencies such as extension agencies and others responsible for the delivery system?

- c) Development implications.
 - i) Has there been an increase in local government awareness of and commitment towards the research activity undertaken in the project?
 - ii) What is the expected impact and importance of the research results on the country and region?
 - iii) Is there any policy change that can be directly related to the project?
 - iv) What is the likelihood of widespread application of the achievement or replication of the activity - in the country? in the region? beyond?
- d) Beneficiary.
 - i) Was the project designed to assist a particular beneficiary and was the target group involved in testing the research?

3. IDRC's Role and Involvement

- i) How do the staff in the recipient institution and the Program Officer assess the value of IDRC's involvement in the project?
- ii) What IDRC policies and regulations need review and change to improve the achievement of project objectives?
- iii) What lessons were learnt which could assist in developing new projects?

4. Overall Assessment

- i) Was the project worthwhile and has it achieved significant results (which may or may not be related to the stated objectives) justifying the combined expenditures by the Centre and recipient institution?
- ii) What follow-up action is required, if any?

ANNEX 2

- a) LATIN AMERICAN RESEARCH PROGRAM ON HUMAN REPRODUCTION
- b) REMOTE SENSING PROGRAM
- c) IDRC/SPRU TRAINING PROGRAM

a) LATIN AMERICAN RESEARCH PROGRAM ON HUMAN REPRODUCTION

The objectives and composition of this evaluation mission are outlined in the report and covering memo circulated separately to the Board.

b) REMOTE SENSING PROGRAM

The evaluation of this program will be carried out in October/November by Mr. Price, former Regional Director of the IDRC Regional Office in Nairobi, Dr. Bruce from the Canadian Centre for Remote Sensing, and Dr. Beltran, Deputy Director of the Latin America Regional Office.

The objectives of this evaluation will be to:

- (i) determine whether the individual projects have achieved their objective, and whether the project activities were efficiently and effectively carried out;
- (ii) assess whether the project objectives were realistic and achievable with the human, institutional and financial resources available;
- (iii) assess whether these projects have contributed to the development of scientific personnel and institutional capability and whether this capacity now exists to carry this work on with their own resources;
- (iv) assess whether IDRC's role and involvement in developing and supporting these projects has been appropriate;
- (v) assess whether productive international linkages appear to have been established among those participating in the projects and whether these imply potential region-wide benefits; and
- (vi) assess whether the experience gained in these projects can or has provided any useful guidelines or methodology which can be used in the transfer of this or other technologies to other developing countries.

c) IDRC/SPRU TRAINING PROGRAM

Dr. Norman Girvan, Chief Technical Advisor of the National Planning Agency of Jamaica will conduct this evaluation jointly with Dr. Norman Clark, former Director of the Science and Technology Policy Research Unit at the University of Ife.

The objectives of this mission will be to:

- (i) assess the academic merit of the courses and teaching material used;
- (ii) determine the benefits and costs of this program to the University of Sussex and, in particular, to the Science Policy Research Unit and project staff;
- (iii) examine the cost and effectiveness of training scientists at Sussex with this kind of program and possible options for such courses in developing countries or in Canada;
- (iv) assess the need for future such training programs and any changes in content or structure of such courses which would improve their value to participants;
- (v) determine the benefits of this course to science and technology policy research participants; and
- (vi) assess the present and potential impact of this program on science and technology policy research in developing countries.

ANNEX 3

POLICY STUDIES

- a) APPROPRIATE POLICIES TOWARDS THE LEAST DEVELOPED COUNTRIES WITH SPECIAL REFERENCE TO AFRICA
- b) IDRC SUPPORT FOR TRAINING
- c) THE DEVELOPMENT OF RESEARCH NETWORKS

a) APPROPRIATE POLICIES TOWARDS THE LEAST DEVELOPED COUNTRIES WITH SPECIAL REFERENCE TO AFRICA

There is great diversity in the quantity and quality of scientific manpower and the institutional infrastructure between and within developing countries. This requires flexible Centre policies so that projects can be tailored to each specific situation. However there are broad differences in the level of scientific and financial resources of the LLDCs, the resource rich and middle income LDCs. It is proposed to initiate a series of studies over time to examine the most appropriate Centre policies on the level and kind of support towards each of these broad developing country categories.

The first of these studies commissioned will be a review of the Centre's experience in the least developed countries of Africa with recommendations on how the Centre might provide more support for the development of scientific capability in these countries.

Two former IDRC employees with working experience in Africa, Don Simpson and Tony Price, have agreed to collaborate in preparing this report. The terms of reference agreed with the consultants have been broadly defined in order to allow the consultants to incorporate issues and areas which IDRC staff feel should be addressed in the study. Specific questions which will be used in staff interviews have been developed and are available if you wish to see them.

Program staff have acquired considerable experience in supporting scientists and research institutions in Africa and it is intended that this report will provide a forum for them to present their views on the most appropriate policies and practices for achieving Centre objectives in these countries. The consultants will attempt to interview most of the IDRC program staff with experience in Africa and synthesize and present their views in this report. The consultants will supplement this by drawing on reports and papers by IDRC staff, Ford Foundation and other agencies that have experience in Africa.

It would be impossible to fully canvass the views of African scientists and policy makers but a selective sample will be interviewed by the consultants. Don Simpson will visit each of the two regional offices and Nairobi in October to meet with IDRC staff and advisers as well as to interview African scientists and policy makers in these countries. Tony Price will carry out a parallel exercise, as part of another consultancy, in Mali, Tanzania and the Sudan in November.

While this study will focus only on the least developed countries of Africa, the draft report will be circulated to the other regional offices for discussion and comment. If it is felt that conditions in the least developed countries of other regions are basically the same, it may be possible to generalize the main conclusions and recommendations in this report to all of the least developed countries.

OBJECTIVES

The general objective of this study is to draw on the views of IDRC staff and advisors as well as African scientists and policy makers and other scientists with experience in Africa to determine the effectiveness of IDRC's activities in Africa and whether any changes in IDRC policies and practices could be introduced to better achieve IDRC's objective of strengthening indigenous scientific capability within Africa.

Specifically, the consultants will be expected to consult with the above and present any general consensus as well as provide their own assessment of:

- (a) whether the general quality, effectiveness and efficiency of IDRC supported projects in Africa appears to be lower than in other developing regions with more scientists and larger scientific research systems;
- (b) whether it would be possible to significantly increase the number of projects or the number of countries in Africa receiving IDRC support without reducing the present quality or effectivenes of projects;
- (c) whether the quality and effectiveness (in terms of general IDRC and specific project objectives) could be improved by changes in IDRC policies and practices in Africa;
- (d) whether a change in policies and practices would allow additional projects, if funds permit, to be supported which either do not merit or cannot effectively utilize IDRC support within present IDRC policies and guidelines; and
- (e) what would be the advantages and disadvantages of any change in IDRC policies and practices recommended in this tudy.

b) IDRC SUPPORT FOR TRAINING

Formal and non-formal training has been one of the primary methods used to achieve the Centre's objective of enhancing the research capability of developing countries. No exact figures are available but it is conservatively estimated that the Centre provides in excess of three million dollars annually in support of training with probably more than 1500 scientists to date receiving IDRC funds for training. This represents a substantial proportion of IDRC's program, administrative and financial resources and an equally substantial use of the scientific resources of developing countries.

In the process of catering to different training requirements identified over time, the Centre has developed a variety of mechanisms such as pre and post-project awards; project grants ranging from Ph.D. training in Canada to short field courses and study tours; and projects exclusively devoted to training. There appears to be some variation in the criteria used for trainee selection and different conditions and benefits applied to trainees.

The purpose of this first comprehensive study on training will be: to determine the nature and extent of the Centre's activities in support of training; to assess and compare the benefits and impact of these different Centre programmes and to recommend practical guidelines for improving the Centre's effectiveness in supporting the training requirements of developing countries. The draft objectives of this study are attached. A detailed work program including questionnaires to be sent to IDRC-supported trainees, supervisors and project leaders is being developed and is available on request.

OVPP will work closely with the Program Divisions and the Human Resources Program in carrying out this study and an Advisory Group composed of representatives from each of these programs has been established to monitor and guide the consultants on this study as it progresses.

OBJECTIVES

Generally, to undertake a qualitative and quantitative assessment of the Centre's training programmes, and specifically:

- to outline trends in the demand for, and supply of research training by country or region, by training type or level and by profession;
- to provide a crude assessment of the contribution of LDC's, other donor agencies, and the Centre, to the supply of trained research personnel by country or region, by training type or level and by profession;

- 3. to draw on external studies and reviews to describe and assess the benefits or impact of various approaches to research training;
- 4. to describe, compare and assess various Centre policies (implicit and explicit) that have been developed to support training activities;
- 5. to describe and assess various Centre "structures" that have been developed to support training activities;
- 6. to describe and assess various Centre operational practices that have been developed to support training activities; and
- 7. to assess and compare the overall benefits and impact of various Centre training programmes and to recommend practical guidelines for attaining improvements in the Centre's training policies, programmes and practices.

These objectives have been defined so that specific activities may be carried out to answer each. It is not intended that a major effort will be directed towards the first two objectives. However, we intend to check with other agencies supporting training and to review the literature to see if we can provide some general estimates on the kind of contribution IDRC can make to meeting training requirements of developing countries. A combination of literature and file research, mail surveys and personal interviews will be used to address the last four objectives.

c) THE DEVELOPMENT OF RESEARCH NETWORKS

This study is only at the initial stages of definition and discussion with Program Divisions and it is not expected to begin until the last quarter of this Fiscal Year.

IDRC programmes are organized on a global subject or disciplinary basis rather than on the geographical country or region basis common to most other donor agencies. One of the primary reasons for this is the advantage it gives IDRC in being able to link research scientists from different institutions and different countries together. This has allowed IDRC to help "create research networks through which developing countries can share common experiences, conduct studies with a common design in areas of mutual concern, and learn from each other as they work towards common goals." (IDRC Report)

This approach is not without costs and disadvantages in terms of travel costs and staff time spent travelling to widely dispersed projects. An additional disadvantage is that IDRC staff are unable to develop an in-depth knowledge of the national research requirements of the large number of countries in which they develop projects.

It would appear to be worthwhile to examine whether the efforts made by IDRC staff in helping create networks are worthwhile to developing country scientists and if so, how we can increase the benefits individual scientist and institutions receive from collaboration in a network.

DRAFT OBJECTIVES

The general objective of this study is to examine the different network strategies utilized by IDRC and how the Centre might use the network approach more effectively to help develop scientific capability in developing countries.

Specifically the study will:

- determine the extent to which the network approach has been used in IDRC supported programmes;
- determine the various approaches to developing networks employed by IDRC staff;
- assess the advantages and disadvantages of different methods used to build networks;

- 4. assess the extent to which these networks encompass scientists and institutions not directly supported through IDRC projects including scientists and institutions in Canada and other industrial countries;
- assess the extent to which links between scientists and institutions are maintained after IDRC support for their projects or for the network as a whole is discontinued; and
- 6. to assess the value of the networks approach to improving the scientific capability of developing countries and to make recommendations on how IDRC might encourage the development of more effective networks.