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# **Project Leader Tracer Study Reviews IDRC's Performance**

by Curt LaBond



Since 1970, IDRC has supported more than 4,000 project leaders

The majority of project leaders who have been supported by IDRC praise the Centre's flexible, cooperative, and responsive approach to program delivery. And they say that the support provided by IDRC staff — and the networking opportunities resulting from their involvement with the Centre — have helped them professionally. However, many recommend closer links between IDRC and research teams, both during projects and after their completion.

Those are some of the <u>key findings</u> from the Project Leader Tracer Study, a retrospective look at the Centre's performance during its first 25 years. Conducted by the IDRC Evaluation Unit, the study sought to: obtain an historical overview and demographic profile of former project leaders; assess the impact of IDRC support on individual project leaders; and generate useful lessons for Centre-wide policymaking, project development and design, and training.

#### 4,000 AND COUNTING ...

Since 1970, IDRC has supported more than 4,000 project leaders throughout the South. The Tracer Study involved 315 alumni, selected at random, who completed written questionnaires. Of these, 50 people also took part in <u>face-to-face interviews</u>.

On the whole, participants indicated that IDRC support was beneficial to their careers. More than 90 % of

respondents felt that their involvement with the Centre had enhanced their abilities in a variety of skills — particularly project management, leadership, and communication.

#### **NETWORKING OPPORTUNITIES**

The survey respondents ranked networking opportunities as IDRC's most important contribution to their careers. "Through networking, I improved my department's image internationally," said one project leader. "Every time I convened a meeting with foreign colleagues, it was easier because I was known to them because of my work with IDRC."

Another key finding was the high level of enthusiasm for IDRC's approach to program delivery, says Stephen Salewicz, co-author of the study. "IDRC reviews project designs very thoroughly, but once they are funded, project leaders are encouraged to learn by doing," he explains. "It's not like at some agencies, where Northern consultants are sent to oversee or to participate in the project." Respondents did stress, however, that they place a high value on direct contact with IDRC staff, so occasional breakdowns in communication were frustrating.

#### **GENDER IMBALANCE**

In other results, IDRC received mixed reviews for its efforts to redress the historic gender imbalance among researchers in developing nations. Some respondents said they had become "more aware and sensitive" to gender issues through their association with the Centre, and had learned that female researchers are as capable as males. However, over the past decade, the percentage of female IDRC-sponsored project leaders has actually dropped from 27 % to 20 %.

On a more positive note, many project leaders indicated that IDRC had opened up new approaches to research. "Before the IDRC-supported project, I was working on my own," said one person. "During the project I got to work with geographers, doctors, epidemiologists, and I understood the complementarity of various disciplines. The work was easier and more comprehensive. An interdisciplinary research approach is now included in all my projects."

Curt LaBond is a writer based in Ottawa.

#### **RESOURCE PERSON**

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## PROJECT LEADER TRACER STUDY: KEY FINDINGS

- Project leaders were asked to rate the impact that IDRC project support had on eleven skills. Of the skills reported to have been "greatly improved," "project management,", "leadership," and "communication" skills were rated the highest by the greatest number of project leaders (72%, 65%, and 54%, respectively).
- For certain skill types, younger, less experienced researchers significantly improved their skills relative to their older, more experienced colleagues.
- The percentage of project leaders who reported very extensive collaboration with IDRC program staff declined from a high of 76% in the 1970s to 55% in 1991–1994.
- One-third of project leaders reported that collaboration and contact with program staff had greatly supported their career advancement.
- Sixty percent of respondents reported that IDRC's most important influence on their careers had been in linking them to networks of other researchers and organizations. In so doing, project support gave them the opportunity to contact the best researchers in their relevant fields, to develop links with policymakers, and to enhance their profile and reputation within the national and international research community.
- Project leaders were asked to rate the influence that IDRC had had on the adoption of new research approaches. They reported that IDRC had the greatest "positive influence" in promoting the "utilization of research results" (84%) and the "need for multidisciplinarity" (78%). IDRC had the least influence on "gender considerations" in research (35%).

# **PROJECT LEADER TRACER STUDY: WHAT THE PARTICIPANTS SAID**

"IDRC permitted me to develop professionally in my country. Otherwise, I would have had to go abroad and not come back; there was no alternative."

"In my first project, I had 10 people working under me who I had to supervise. It was the first time I had the responsibility to manage a research project, and deal with real-world problems. This experience is very useful now, because I have to manage 200 people."

"I have become more effective and efficient in accessing funds. This is an important skill because our organization requires outside funding to keep going."

"(From my project experience) I met the best scholars in the relevant fields and learned how to identify and contact those I did not already know."

"Sometimes the IDRC evaluation of progress reports is slow, causing delays in funding."

"The opportunity to design, write, follow through, and complete a project was the most valuable aspect of being involved in an IDRC-supported project."

"IDRC likes you to shine on your own. IDRC shows you how to swim and lets go — it's up to you to sink or swim."

"Rarely have I received any information from or about IDRC after I finished my final report. IDRC seemed to vanish."

"Before the research project, I thought of women as 'second class citizens.' But while looking into fertility issues, I began to read books on feminism and had to admit I was biased and discriminatory. I now treat women as partners and equals. My daughters and my sons are treated the same. The study showed me that women really don't want so many children but pressure from their mothers and elders plus traditional beliefs force them to have more children than they really want."

"We held meetings in communities where people were encouraged to voice their opinions. Although this took longer, through this approach we realized rare and important things that may have been otherwise overlooked."

"One of IDRC's gaps is its failure to provide follow-up support to take advantage of the results after projects are completed. The Centre could develop cooperative policies with industry, for example, to carry on with the results."

"If IDRC projects succeed, it is because IDRC trusts national researchers. If a Canadian expert had been sent to manage the project, he would not have succeeded. IDRC should keep on working exactly as it has done until now because it produces results and allows Southern researchers to gain confidence." Please send your comments to editor of Reports.

# **PROJECT LEADER TRACER STUDY: WHERE WE GO FROM HERE**

The Project Leader Tracer Study was the largest assessment of IDRC in the Centre's history. As such, it represents the first piece in a two-piece puzzle, says Stephen Salewicz, a consultant with the IDRC Evaluation Unit. "With this study, we have feedback on how well IDRC builds the capacity of Southern scientists to design and carry out their own research. But the question remains: How much impact do these projects actually have on communities overseas?"

Next on the agenda is a series of studies of development impact. According to Salewicz, their goal is to measure whether and how IDRC-funded projects produce results which actually benefit people — both during the life of the project and afterwards.

The Centre is also considering an end-of-project report for project leaders. "We already use a Project Completion Report (PCR), prepared by IDRC Program Officers," he explains. "The idea is to have funding recipients complete parts of the PCR, so we can find out what they have to say about IDRC and incorporate that information into the design and implementation of subsequent projects. Reviewing our strengths and weaknesses needs to be an ongoing process."

Curt LaBond is a writer based in Ottawa.

#### **RESOURCE PERSON**

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IDRC Reports January 1995 Volume 22 Number 4 (Faces of Southern science : researcher profiles)

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Vol. 22, No. 4 (January 1995)

## Support to Southern Scientists: Achievements and Lessons Learned

#### by Terry Smutylo and Philip Ward

In large part, the accomplishments of IDRC over the past quarter century may be said to rest squarely on the shoulders of hundreds of innovative and tireless researchers throughout the developing world. Therefore, IDRC's 25th anniversary offers an excellent occasion to celebrate the achievements of the many researchers the Centre has helped support, and to draw lessons from its experience in supporting research for development.

For 25 years, strengthening indigenous research capacity in response to needs determined by the people in developing regions has been an enduring element of IDRC's strategy. Some idea of the success of this approach is provided in a 1993 analysis of IDRC's experience in strengthening research capacity<sup>1</sup>. According to the author of the analysis, Tim Dottridge, strengthening the capacity of individual researchers in the South is implicit rather than explicit in the IDRC approach. Centre programs support institutions working on research that addresses development problems, with capacity-building usually as a secondary objective. Although both formal and informal training provisions are often built in, they usually have been geared directly to the technical needs of a specific project. In addressing development problems this way, IDRC pioneered support to empower Southern scientists to define development problems and to conduct relevant research.

Based on the conviction that one of the best ways to build capacity is through actual research activity, the primary target of IDRC support has been research designed and undertaken by developing country researchers working in institutions in the South, often in linkage with others working on related problems elsewhere in the world. While most projects funded are in established institutions with an experienced research team and focused on problem-solving research rather than on capacity-building, a smaller number of the Centre's projects are essentially capacity-building exercises to augment hands-on research experience .

Over 20,000 developing country scientists are estimated to have worked on projects supported by IDRC. About two-thirds were senior researchers, usually graduates; the remaining third were more junior. IDRC evaluations suggest that on-the-job research training in the developing country context is effective in strengthening indigenous capacity not only to focus research on topics related to national priorities, but also to utilize and contribute to local and international publications and meetings; to test results in field conditions, utilizing local industrial and agricultural extension agencies; to attract funds from other sources; and to develop practical skills in research management.

Both formal and informal training have been used to complement the practical experience gained through IDRC-funded projects. In the 1983-89 period, training absorbed approximately 13% of total program funding, and a third of projects had a training component. Roughly two-thirds of this funding went toward

informal training such as short courses, seminars, workshops, and group and network-based training, with formal, degree-related training accounting for the remaining third. Of the degree-related training, 52% was for Master's degrees and 32% was for PhDs.

Capacity-building is also a function of collaborative projects linking Southern scientists with Canadian scientists in similar fields to work on related research problems. Developing-country researchers, through cooperation with Canadian researchers have access to new people, techniques and information. And Canadian researchers have an opportunity to look at their work in different, broader contexts and to adapt their approaches to conditions in other countries. The Centre is currently evaluating collaborative activities to determine the strengths and weaknesses of this mechanism.

The arrival of the information revolution validates and gives urgency to the long-held goal of IDRC's Information Sciences and Systems Programs to make Southern information professionals and practitioners recognized as key players in empowering developing country societies to apply knowledge for their own benefit. Efforts in this field have included short-term courses to meet immediate requirements for up-grading practical skills in specific fields, as well as improving opportunities for postgraduate education to strengthen professional capacity for addressing long-term needs in identifying, processing, retrieving, repackaging and disseminating information for development. Examples include a regional consortium of information science graduate schools in Africa, and strengthening training capacity in information handling in Asian and South Pacific countries.

#### THE RECOGNITION FACTOR

Another, much more subtle way in which IDRC has bolstered the ability of individuals to contribute to development has been to raise the profile of researchers individually and in groups, thereby increasing their recognition and influence. One way this is done is through links with other researchers in their fields. Domestic recognition is often the result of recognition at international workshops, symposia, networks and other linking mechanisms that are basic to IDRC's approach. It can also stem from press coverage of such events or from a significant research breakthrough. By recognizing the quality and potential of a particular line of investigation and by providing researchers with the resources to make a significant contribution, nationally or internationally, IDRC has seen the stature of many grant recipients increase dramatically, along with their capacity to contribute to development.

During the early 1980s, in response to hostile environments for social science research within countries under military rule in the southern cone of Latin America, IDRC offered special institutional support to social science research institutions in these countries to cover both research and overhead costs. Other donors cooperated in this effort and, as a result, nine social science research institutions in Argentina, Chile and Uruguay had sufficient financial security to maintain a productive core of research staff during a difficult and uncertain period. Then, during the post-military period in these countries, the institutions and social scientists began to receive financial support from their own governments. Now many of these researchers have made significant contributions to economic and social policy in their own countries. Some now hold positions of power and leadership in civilian, democratic governments.

While it is difficult to assess the total impact of IDRC support on Southern scientists, information drawn from EVIS, the Centre's evaluation database, provides some lessons concerning the effects on Southern researchers involved with IDRC-supported projects. Beyond the strengthening of technical skills and experience, researchers report being motivated by having had the opportunity to use their skills and having been able to gain credibility and confidence. Also of great importance has been IDRC's support in helping researchers in the South overcome isolation through information systems, conferences, collaborative projects and other mechanisms that provide links with other researchers around the world.

#### **OVERCOMING ISOLATION**

A 1991 global tracer survey of IDRC award recipients noted that over 80% were very satisfied with the theoretical and substantive knowledge gained; and that the training was very helpful in advancing their

overall careers. The major problem facing trainees when they return home is a chronic lack of research funds and an abrupt end to ongoing contact with other trainees and the research community at large. Training without subsequent support is a problem increasingly noted in evaluations. The provision of continuing support and the development of networks linking past trainees working on topics of mutual interest has been suggested as one method of surmounting this isolation.

A portion of IDRC program funds has also gone toward small grants to improve individual researcher skills. These grants have had a great impact by fostering networking within countries, allowing exchanges of information, breaking academic isolation and promoting the emergence of a scholarly community. To strengthen the competence of individual researchers, monitoring and technical supervision of grantees and the critical review of research reports are essential.

In an effort to evaluate yet another component of IDRC's support and capacity-building role in the work and achievements of Southern scientists, the Centre is presently conducting a strategic evaluation tracer study of former IDRC-supported project leaders. While there have been tracer studies of former IDRC training and fellowship awardees, there has been no aggregate assessment of where IDRC-supported project leaders come from, where they go after IDRC support, and how their relationship with IDRC affected their professional development. This tracer study will attempt to fill this gap (and will be featured in a future issue of IDRC Reports).

Initial findings from the project leader tracer study, and other Centre evaluations, have revealed that many IDRC-supported researchers have gone on to make significant contributions to sustainable development. This issue of IDRC Reports is dedicated to profiling individual researchers and to celebrating their accomplishments. Along with many others like them around the world, these researchers give us cause for celebration this anniversary year. It is their commitment and dedication to their work, often under severe and challenging circumstances, that provides inspiration in the quest to answer the pressing problems of our times.

- Terry Smutylo is Director, Evaluation Unit and Philip Ward is Researcher, Evaluation Unit, Corporate Affairs and Initiatives Division, IDRC, Ottawa.

<sup>1</sup> Tim Dottridge, Strengthening research capacity: the experience of the International Development Research Centre, in Development and strengthening of research capacity in developing countries. RAWOO: Advisory Council for Scientific Research in Development Problems, The Hague, Netherlands, 1993.

#### See also In person: Profiles of researchers in Africa, Asia, and the Americas

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Vol. 23, No. 3 (October 1995)

# VIEWPOINT: THE INTELLECTUAL ARROGANCE OF THE NORTH

by John Eberlee



Credit: Eco Latino, Ottawa

Large-scale production of the world's first vaccine showing both safety and efficacy against malaria could begin as early as 1997. But the vaccine might already have been in use if not for the "intellectual racism" of scientists in the North.

That is the view of the vaccine's developer, Colombia's Dr Manuel Patarroyo, WHO bore 6 years of attacks from the international research community after reporting his work. "When we first published our data in 1987, they said, 'It's impossible that a malaria vaccine is coming from Colombia.' They were reluctant to accept that there was not just a malaria vaccine, but the world's first chemically synthesized vaccine."

Patarroyo, founder and director of the Immunology Institute at the National University of Colombia in Bogota, joked during an Ottawa luncheon sponsored by IDRC and the Canadian Science Writers Association that had he been American "I might have already received the Nobel Prize."

Patarroyo's experience is featured in *Southern Lights: Celebrating the Scientific Achievements of the Developing World*. The Colombian immunologist has a message for the developed world: "There are lots of good scientists in the developing world working hard to solve the problems of mankind." Patarroyo's war on malaria began in the early 1980s when he organized a monkey colony in the Amazon jungle as an

experimental model for malaria. His team isolated different molecules of the malaria parasite, then immunized the monkeys with each one.

"We found four molecules to concentrate on. We then went back to the Amazon and identified the specific pieces of the structures that induced protective immunity. We mixed them up and made a vaccine cocktail," explained Patarroyo.

Critics dismissed the results, published in *Nature*, on grounds that the vaccine had not been tested on humans. When data showed the vaccine to be safe in humans, they criticized the method of transmitting the parasite -- via intravenous injection rather than by a mosquito bite. In fact, injections are more scientifically defensible, since it is impossible to tell whether a mosquito harbours the malaria parasite or in what numbers.

While this issue was debated, Patarroyo launched a major clinical trial involving 25,000 Colombians. Although the results clearly showed the vaccine's efficacy, critics charged that the trial had been improperly designed. Nor were they satisfied by subsequent trials in other countries, which met standard epidemiological criteria.

"The efficacy rate of the vaccine was 40% in Colombia, 55% in Venezeula, 60% in Ecuador, and 35% in Brazil," said Patarroyo. But the critics said that it might not work in Africa where the malaria challenge is greatest. However, a recent trial in Africa places the vaccine's efficacy at 31% for malaria morbidity. The next steps in Africa will be to determine the vaccine's impact on malaria mortality in order to understand its public health effectiveness.

The scientific world has now bestowed over 50 awards on Patarroyo. But Patarroyo has refused offers from drug companies of up to \$68 million for the vaccine rights, choosing instead to donate them to the WHO.

"It is not my project in life to become a millionaire, or to be powerful or famous, but really to solve what I want to solve. That is my life project, my life purpose," he declared.

#### John Eberlee is an Ottawa writer.

Southern Lights: Celebrating the Scientific Achievements of the Developing World by David Spurgeon IDRC Books isbn 0-88936-736-1 CA\$19.95

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# The Key to Profit: A Practical Guide to Managing Science and Technology

by Scott Tiffin

This publication is out of print. In Canada, copies may be borrowed from the <u>IDRC Library</u>. Outside Canada, please contact one of IDRC's many <u>depository libraries</u> around the world to borrow or consult a copy of this publication. A microfiche copy may be obtained from Micromedia Ltd, 20 Victoria Street, Toronto, ON, Canada M5C 2N8 (phone: 1-800-387-2689; email: <u>info@micromedia.on.ca</u>). Full-text versions of many out-of-print IDRC publications may be also found in the <u>IDRC Library's online archive</u>.

Industries in all countries of the South, no matter what their level of development, their level of sophistication, or their sector of activity, can profit from science and technology.

This unique book is a practical guide to benefitting from science and technology. It is based on field experience throughout the world and on an examination of best-practice cases.

Author Scott Tiffin shows why technology is important for competitiveness, how to manage technology to improve competitiveness and foster industrial development, and what key projects to undertake to build the capacity to manage technology.

The author describes the underlying principles and organizational designs that are necessary to manage technology and increase competitiveness.

*The Key to Profit* is for managers of aid programs in development agencies, government policymakers responsible for science, technology, and industrial development in the developing world, and managers of private firms.

The author

Scott Tiffin is president of SocioTECH Inc., a Calgary-based firm that innovates decision-support software for investment in research and development and consults in science and technology management. Dr Tiffin is also an adjunct professor in the Faculty of Management at the University of Calgary.

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## *The Key to Profit: A Practical Guide to Managing Science and Technology* IDRC, 1994 Paperback (5.75 x 8.75 inches), 90 pp., ISBN 0-88936-717-5, CA \$12