Canada's Role in Science and Technology for Development

Proceedings of a symposium held at the Ontario Science Centre, Toronto, Canada 10–13 May 1979

J. King Gordon
Editor
Contents

Foreword    J. King Gordon, 5
Opening Remarks    Louis Berlinguet, 9
Welcoming Address    Tuzo Wilson, 11
Introduction    Ivan L. Head, 12

UNCSTD: The Challenge of Vienna
UNCSTD: Background, Objectives, and Ultimate Goals    Guy Gresford, 15
Views from Developing Countries    Jorge Sabato, 19
Discussion and Summary, 25

International Scene
Obstacles to the Use of Science and Technology for Development    Antoine Zahlan, 29
Role of the International Scientific Community    Alexander King, 33
Science and Technology Policy in Developed and Developing Countries    C. H. G. Oldham, 39
Interface between Science and Technology and Socioeconomic and Cultural Development    Vinyu V. Vadakan, 43
Discussion and Summary, 46

Canadian Experience
CIDA: Experience in Technical Assistance and the Transfer of Technology    William Jenkins, 57
IDRC: Experiment in International Development    Rex Nettleford, 63
Discussion and Summary, 71
The Canadian Scientific Community Responds to the Challenge: the Present, 73

New Directions
Governmental View of Science and Technology for International Development    Robert Johnstone, 81
Operations Research is Needed at Home and Abroad in Development    Omond Solandt, 85

Doing the Job
The Inter-University Council in Great Britain    Richard Griffiths, 91
Netherlands Universities Foundation for International Cooperation    A. J. van Dulst, 95
International Development Office of the Association of Universities and Colleges of Canada    Michael Oliver, 99
The Swedish Agency for Research Cooperation with Developing Countries    G. Richert, 101
Institute for Scientific and Technological Cooperation  Princeton Lyman, 105
The International Foundation for Science  Gordon Butler, 109
Discussion and Summary, 112

Canada's Contribution
Preview of Canada's Contribution to the Vienna Conference  James Mullin, 117
The Canadian Scientific Community Responds to the Challenge: the Future, 123
Participants, 129
The nice introductions I have been hearing during this conference reminded me of a little poem that goes:

The art of biography is different from geography: Geography is about maps and biography is about chaps.

Perhaps we can look on this forum this morning as about "the chaps on the maps." As I was listening to my colleague Richard Griffiths, as I have had the pleasure of doing many times during all kinds of international conferences, I was reminded of another poem, which, with some slight variations, runs as follows:

Like the body of England, breathing English air washed by the rivers of experience and blessed by the sun of home.

So, I have the impression that you Canadians may feel more at home when you are listening to Griffiths because IUC is much better known than our organization, NUFFIC. Nevertheless, your scouts sent out to inspect western Europe quickly discovered the now 26-year-old NUFFIC, which has a staff of more than 120 in The Hague. Professor Norma Walmsley gave quite a lot of space to a description of my organization in her report Canadian Universities and International Development, which was brought out in 1970. In that report, IUC and NUFFIC were often cited as rather special examples in that our entire operation is financed by our governments. In many ways — and I don’t have to repeat what Richard has said — IUC and NUFFIC are alike. We are doing most of the same things out of the same spirit. But perhaps there is one exception, because we are combining some functions of IUC and the British Council. One of the key words in NUFFIC’s organization, as I hope you will discover during my speech is that we go in for “combinations.” We like to get as many activities as possible in the field of university cooperation under one umbrella.

Of course, in a country like ours we have to face the fact that we have the handicap of not speaking an international language. But we have tried to turn that disadvantage into an advantage. As early as 1950 a state commission was appointed to investigate how Dutch higher education could be adapted to international requirements. It was concluded that special institutes outside of the universities should be founded where courses, mostly postgraduate but also mid-training, could be taught in English and in French to the Dutch and to people from other countries. These institutes, mostly with full-time staff available all the time for people from abroad, could draw upon the resources of all the
universities in the Netherlands. To coordinate the whole operation NUFFIC was founded in 1952, and most of the big international training institutes date from that time. Since then NUFFIC has promoted a number of these institutes. Today there are 18, covering 66 fields and serving more than 1600 participants a year, mostly in postgraduate courses.

In Walmsley’s description of the experiences of some other countries in the mobilization of resources the Netherlands comes out fairly well — better than it deserves, I’m afraid, because our universities have a tendency to be preoccupied too much with themselves. That is one of the reasons that you need to have a central organization. I think the best thing I can do this morning is not to repeat what Griffiths has already said about our activities, but to concentrate on an area in which I think you should be most interested because of the fact that you still have to organize these activities at home.

Walmsley brought out her report in 1970, the year that IDRC was founded. And this reminds me that Canada has been ahead of us. True, by 1970 NUFFIC had a proven track record in areas of international training, in facilitating university links, in a lot of information activities, including those within the universities, in special development studies, and in the assessment of diplomas. But it was only in 1976 that we became closely involved with an improved structuring of the research portion of the Dutch government’s development program. We have great admiration for the organization and work of IDRC. During this conference I have been really impressed by the motivation of your people. But I am also slightly surprised by the modesty of Canadians. I think in many ways you can be justly proud that Canada is pioneering so well, especially in research in developing countries. This example is undoubtedly benefiting developing countries, but I am also sure that it is benefiting at least one developed country, ours, because we are trying to set up, of course in a specific Dutch way, the same kind of organization.

The question is: How can the Dutch example be of service to you in the area of organizing the home front? I must stress that before you begin to discuss what Canada can do in the field of international cooperation you have to organize your home front. Much of what I have to tell you about our position has to be viewed in the context of the rather favourable climate in my country for development cooperation. But I will not begin there because that climate is influenced by our efforts and was created by the influences from the Dutch universities. A number of the institutes for international education, as I told you, date as far back as NUFFIC itself, to the early 1950s, when there was no talk at all of a structured development policy in our country. There was not even a ministry of development cooperation. It was long before the First Development Decade. So international education has really been an invention of the universities. It was an early sign of international solidarity. And in many ways it was a model for our government to go ahead with development cooperation.

I would like to stress again that the pursuit of knowledge doesn’t flourish in parochial isolation, and the mutual understanding of people cannot be left to entertainers and officials: the universities have to seek it. They have to broaden their curricula and include development training as part of the regular training courses. Nonetheless, we must be realistic. Universities and their administrators are occupied primarily, as they have to be, with regional and national tasks. One can spare oneself a lot of frustration in this kind of work if one never expects development work to occupy centre stage at the university. It is difficult enough to hang onto a position in the wings. For that alone you need an organization, a national organization, to act as a prompter and to be the voice of
the international conscience that universities need to hear, time after time, just to get off their preoccupation with their own business.

It clearly does not seem adequate to have international academic cooperation solely an affair of individual universities that conform to such policies and practices as spending agencies impose. We need freedom for diverse initiatives. We need academic entrepreneurs and special undertakings. But we also need national machinery, national instruments serving a policy that has been determined jointly. Such a national organization must leave much of the implementation to the universities. But the universities must also have confidence in the national organization and give it freedom in the areas of coordination and policymaking. Universities have always possessed enormous potential for activities relevant to problems of development. But that potential must be maintained, and a willingness and enthusiasm must be nourished and reinforced. That can happen within a university through motivated staff members and through officers of international affairs, which should be in every university. But it should also be done at the national level.

The chairman mentioned that I have come out of the communications field. But long before I joined NUFFIC they had started a lot of information activity. We publish a monthly journal to provide information to the universities that is solely devoted to international university cooperation. We also publish a quarterly journal called *Higher Education and Research in the Netherlands*. But we are slightly different in our approach from our American colleagues because the Americans have emphasized a second mandate, to provide the United States with information on what is going on in the world, the first mandate being to provide the world with a lot of information on what the United States is going to do. Now we are a small country, so our first mandate is to inform our people about what is going on in the world, and our second mandate is to inform the world about what is going on in Holland. That constant outflow of information is really vital in keeping alive an interest in and a dedication to university cooperation, and I really think you cannot do without it.

Now I come to the quite good development climate we have in our country. It is a good sign that our Ministry of Development Co-operation has the largest and best information services of all the ministries. But for information for the universities the Ministry relies particularly on NUFFIC. So all these things together — the pressures from the universities, the pressures from the churches, the pressures from the labour unions — make it possible nowadays for our government to maintain quite a high level of development assistance despite the necessary spending cuts in the national budget. There is in my country, I am happy to say, still a unanimous vote for keeping development cooperation at the highest level untouched by spending cuts. There is real unanimity in the government, the Parliament, the most important political parties, and the people. Perhaps I should remind you that there is a United Nations target for development cooperation: the funds allocated should be 0.7% of the gross national product. But one of the problems of our time is that only three countries — Netherlands comes second; Sweden, first; and Norway, third — have surged past this figure. Most of the big countries, like the United States, Germany, and Japan, have met only about one-third of the target, which was set 20 years ago.

For all these things we are trying to work together with your government to have an influence on the setting of government policy. One needs to have a central organization to make it possible for the government to approach one organization they can trust because it represents the potential of the universities, and at the same time the universities have to make it possible for the
government to approach them. For all these things you really need an organization that is between, as has been explained by several speakers. It is very difficult to speak one another's language. Governments and universities are supposed to be worlds, miles, apart, each with their own procedures, each with their own language. You really need an in-between organization that understands the language of the universities but is also well-informed about the policy of the ministries. When you are intermediating in this way you can come up with certain results. The watchword we are trying to use is: Don't wait; don't complain like some scientific people do when they meet together: they're always blaming the government, just as when government people get together they blame the universities.

So let me give you this advice: Don't wait. Initiate, especially from the tremendous potential you have in the universities. Don't sit together. Go out and speak with your government people. Try to mobilize some influence and don't be afraid to go the political way. For all those things you need a national organization, and try to bring as many activities as possible into one organization. When you have complaints about the criteria of the government on development aid cooperation bring them right to the table. That's what we have done in creating a structure that we call the Consultative Council for Cooperation on Methods of Education, where we bring together the government delegation and the nongovernmental organization. All the big projects that go to the Ministry of Development Co-operation have to go through the Council, so that everybody, from the government side and from the nongovernmental side, has a chance to explain on what criteria they are going to say Yes or No. It is also possible to get the involvement of all the institutes of international learning and training and of the universities. We have done that in organizing the structure for advice on scientific research. So the government looks around for who is going to do the job and who is going to provide the secretariat in the most creative way, and you are available to do the job through the central organization.

Let me wind up. You will never hear me claim that everyone in the government and the universities loves us or even finds us indispensable. You always come across some individuals who don't like us because we don't agree with all their proposals. But machinery like my organization will always be necessary as long as we add something real to international events from our position as an in-between organization. Just that bit of something that makes things run more smoothly.

Perhaps I can conclude by advising you to forget about the real meaning of the acronym NUFFIC, which stands for Netherlands Universities Foundation for International Cooperation. You can read all about it in a brochure called NUFFIC in a Nutshell. We had to have some real "Dutch courage" to publish a book on the educational system in the Netherlands, and we called it The Dutch Way. You know how the English have treated the Dutch language in using the word Dutch for all kinds of strong, difficult things. But to return to my piece of valuable advice: forget about the accepted meaning of NUFFIC, but don't forget that the initials can stand for: Never Use Force, For Intermediation Counts.

A.J. van Dulst is Director of the Netherlands Universities Foundation for International Cooperation.