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NOTES ON A MEETING
ON EXTERNAL SUPPORT TO
DEVELOPING COUNTRY RESEARCH

Ottawa, October 14-15, 1988

158.

Notes on a Meeting on External Support to Developing
Country Research

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

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1. BACKGROUND

The purpose of the meeting was to provide a forum for discussion of strategic issues relating to development research¹ in developing countries, its linkages with international and regional research centres and industrialized country research, and the role of external support. The genesis for these discussions was a report prepared for IDRC by Dr. John Lewis on "External Funding of Development-Related Research: a Survey of Some Major Donors". Participants came both from donor organizations that support research and included a number of very experienced individuals from developing countries. The list of participants is in Annex I.

A list of some issues for discussion sent to participants before the meeting is included as Annex II.

The meeting was organized into four sessions:

- 1) The need for a strategic overview of development research funding;
- 2) National research systems in developing countries;
- 3) The contribution of regional and international research centres, and of research in industrialized countries;
- 4) External support to development research.

The meeting was essentially exploratory to see if there was a need for further discussion and work on broad issues and was not intended to get into the detail of the individual issues that were raised. The notes that follow have been organized, as far as possible, by topic and so do not follow chronologically the order of discussion.

2. NEED FOR A STRATEGIC OVERVIEW OF DR FUNDING

In his opening remarks, Ivan Head invited participants to take the opportunity for a broad overview of the area in which they work rather than talking about their own activities and agencies. The primary building block in any view of global DR must be that of the research systems or activities of individual developing countries. Nevertheless, the meeting was expected to look at the usefulness of an overview at various levels - national, regional and global - with the ultimate purpose of ensuring that research provided an effective role in promoting development. Discussion of issues relating to broad, macro-level development takes place on a regular basis and with increasing sophistication in a wide variety of fora; this meeting was to look at the desirability and opportunity for providing a similar overview of research. Its premise was that the international nature of knowledge makes it an area that could benefit from this broader global strategic view.

¹ The focus of the meeting was on research for development. Participants used various terms but here the term 'development research' has been used throughout and abbreviated to DR.

Discussion on this topic addressed two questions which recurred in all sessions of the meeting:

- 1) the need for and usefulness of a strategic vision of DR including the overall pattern of resource flows to research for development both from developing country and donor sources;
- 2) the kind of information required for more effective planning and use of R&D resources.

There was general agreement on the **usefulness of taking a broad overview of DR** and in **obtaining and exchanging information** on patterns and policies of support at both national and international levels. The sense was that this required better exchange of information and views between donors, and that this should continue for the time being on an informal basis - possibly through 'annual seminars'. The complexity and interrelationships between the various aspects of the overall picture became more and more evident as the meeting proceeded, and reinforced the importance of the 'overall' view. There was, however, considerable difference as to the degree that this overview should be formally articulated into a strategy or coordinated approach.

Many participants regretted that decisions, both by individual developing countries and by individual donors in their support of DR, were being taken in isolation from knowledge of what others were doing. This makes for a less effective use of even those limited resources that are available for DR. At the same time there were major gaps in the funding pattern for those areas which were identified as having no natural constituency such as environmental research, research on natural resources, research on the problem of poverty, and research on mental health.

The international Commission on Health Research for Development found that the need for a broader perspective had been emphasized in many of its interviews. "We really don't know, especially from donor groups, what's going on out there, who else is doing things, how much effort is being applied, and how to judge whether it's enough or too much?" This led to the identification of "a number of important areas that do not have any research advocacy or initiative at all at the present time. Some of them are unfinished business areas. Some are new, difficult challenges".

There was also a review of one past attempt at a strategic overview of supporting DR in developing countries - the United Nations Conference on Science and Technology for Development held in Vienna in 1979. The experience, since, showed that there was little prospect for an international initiative led by the developing countries; it appeared that less formal fora, such as the present meeting bringing together participants from developing countries and donor agencies, had a real role to play.

There were cautionary notes about the extent to which a strategic view of research was really possible. Research systems were really far from being **systems** and there are few donor agencies where research is talked about in a multi-dimensional way. It might be more productive to compile data in terms of development training and capacity building. Research may

be more saleable to funding agencies when it is considered in that kind of sectoral context. Nevertheless, there was a real need at both the national and international level to review the overall set of activities being undertaken, across sectors, so as work towards a better allocation of resources and to realize where there were major gaps.

Participants recognized the need for **better information both on donor support to research and on the research resources and activities of developing countries and multilateral centres.** Emphasis on better information on developing country national research was regarded as being critical. Nevertheless, much discussion focussed on information on donor funding since this was more amenable to improvement by those at the meeting.

On donor activities, participants recognized the importance of both project by project information such as that included in IDRIS and being collected by SPAAR and of the macro information collected by John Lewis in his study undertaken for IDRC on broad flows of funding to research.

In all aspects of information gathering, it was recognized that that there would be slow progress towards greater accuracy of reporting, but that even proximate quantification played an important role if nothing else were available. While some indicator of quality is desirable, the first stage should be better collection of **quantitative** information on present patterns of resource allocation and activity in research.

Participants were uncertain as to how far donor agencies could go in terms of stimulating a collection of this information for planning, though they recognized it as being extremely important both to their own efforts and those of the countries concerned.

One major issue in dealing with the environment of research globally was the increasing importance of the **privatization of research.** Participants regretted that information flow was decreasing in some areas due to increased interest in privatizing the results of research - and that this was being extended into areas where it had not previously occurred, such as agriculture. Equally, it was pointed out that patents were a reward to research initiative and that there needed to be consideration, in such cases, of making research results available on a concessional basis to and between developing countries.

There was also discussion of the potential for developing countries to close the gap on industrialized countries, and of new technologies providing an opportunity to leap frog or by-pass technologies at present being used in industrialized countries.

3. NATIONAL RESEARCH SYSTEMS

Discussions emphasized the importance of national programs within the developing countries as the basic building block in any global view of research for development. These programs required their own research agenda and capacity to arrive at the best possible research. While there is enormous heterogeneity between developing countries, there are issues that go beyond what national programs can look at in isolation and which need much closer cooperation and, sometimes, regionalization of some research functions. One feature common to most countries is that the resources and capacities available to DR have come under increased pressure due to overall macroeconomic problems.

Background data was given with respect to the large group of those termed "the smaller countries" with a population of less than 10 million; 67 smaller countries have a population of less than 10 million and, of these, 52 a population of less than 5 million. These countries were spending often as little as 0.1% of GNP on research. There are serious questions then about the choices such countries should be making as to the areas in which they pursue research and how they can obtain and use scientific information from external sources.

Discussion covered a range of issues. First was the **inadequacy of information on research resources** for research planning and formulation of a research strategy in individual developing countries. There was agreement on the failure in many countries of national research councils to provide adequate coordination and planning for national research efforts and the support provided for these efforts from outside. A number of countries were now moving to establish stronger ministries of science and technology but even in these cases, their ability to formulate and implement coherent research strategies was often inadequate. Donors should be prepared to support developing countries' efforts to collect relevant information on the extent and pattern of their own research resources.

Research planning in smaller countries was contrasted with the experience of India. However, in all cases, it was suggested that better results could be achieved by addressing **problem areas** and not talking about science in broad terms.

Successful research organizations in developing countries were cited. Target groups which need the results of DR should be encouraged and helped prepare to gain some control over the research agenda. There were several cases of research institutions which generated some of their own funding through the provision of services.

It was emphasized that whatever the heterogeneity in terms of research capacity, all countries required the contribution of research to ensure informed policy judgements and key management decisions. Beyond this policy research, "field research is critical in adapting technology to local situations, whether there are regional differences within a country or whether the differences are among countries in using technology that has been generated elsewhere." However, a number of countries, if not all, continue to require the kind of international networking or access to results available from international research centres for various kinds of technology.

There was a broad consensus that human resource development lay at the basis of all successful cases where countries had become able to contribute more in the area of DR. Taiwan, South Korea, Jordan were examples of this. There were limits to how much could be done from outside; science and DR must be in the hands of national scientists. There were no examples of externally supported technology leading to national science-based development.

This led on to wider discussion of the elements of "the enabling environment" which lead to the provision of adequate support to DR. This included not only education for researchers but also much more broadly the

whole education process making people at all levels of society aware of the importance of science and its potential contribution to development. Examples were given from East Africa of exhibitions and competitions for scientific endeavour. A further element in this was the importance of avoiding the isolation of researchers, and ensuring continuity through periods of political and economic instability. International and regional associations, international centres and the creation of a regional peer group such as that undertaken by the Agricultural Development Council (ADC) in Asia were examples of initiatives that participants felt could play a major role. Donors should be prepared to consider their support to the DR process as encompassing efforts to ensure that policy-makers in developing countries are aware of the contribution that research can make to development.

Examples were given of excellent institutions decaying and deteriorating. There was a need for **sustainability** in building research capacity and a plea for donors to take two major elements into consideration. The first of these was **time**. Donors showed a marked preference for short term support, whereas research and institution building require periods of 10 to 15 years. The second element was donor preference for being associated with something new rather than reinforcing and strengthening support to an institution or program that had begun with support from other donors. Instances where one donor had taken over from another were the exception.

There was also constant reference to the opportunities for better cooperation between developing countries. It was suggested that donors should be seeking to encourage some kind of "indigenously viable regional development" but this was a delicate issue.

4. THE CONTRIBUTION OF REGIONAL AND INTERNATIONAL RESEARCH CENTRES AND RESEARCH IN THE INDUSTRIALIZED COUNTRIES

This topic was introduced with some consideration of the size and growth of the set of multilateral research centres. One IDRC study showed that these centres had a research budget of some \$500 million and that the total budget was in excess of one billion dollars if one included "research complementing" institutions. From a total of 2 or 3 such centres at the end of the second World War there were now around 200 identified as carrying out some role in research or complementary services to research. There had been heavy concentration in the early years in Latin America and Asia; this had shifted more gradually to Africa. Agriculture has always been a major sector, but there were other areas that might benefit from more resources.

Discussion emphasized that these centres were always intended to play a key role in supporting **national** research. They have provided an important opportunity for interaction between scientists of the North and South and between scientists from developing countries themselves. They had taken major initiatives in terms of human resource development for research and continued to provide vital support services to developing country researchers through networking.

It was suggested that with the increasing strength in national research programs, the need and role for strictly regional centres might change. There was now preference in the Middle East, for example, for the use of networking between national research programs. Emphasis was on building

national organizations "because there is no cooperation between regional and national if you don't have national. There is no cooperation between two nationals if you don't have two strong ones. Two zeros cannot cooperate".

Consideration was given to the desirability of mechanisms similar to the CGIAR in fields other than agriculture. The World Bank often receives a proposal for a new CG but it does not seem "realistic that we have a CG of the kind that we have in agriculture. The kind we have in agriculture was a quick fix that brought external scientists, the best in the world, to IRRI and CIMMYT to try to work on plants because there was not, at that time, an adequate number of indigenous scientists".

Other participants made a distinction between the **functional and physical** nature of international centres. There should be a more flexible pattern in future with centres providing support to networks based on national research efforts. The number of new expensive centres having their own infrastructure would be relatively limited. What is required is a mechanism by which donors themselves begin to review collectively the resources they are putting into developing countries, where these resources are to be focussed, and how they can be put to best effect.

Participants agreed on the importance of **networking** the efforts of scientists and institutions as a means of information exchange and undertaking collaborative research ventures. Developing countries must not be left out of the development and promotion of new communication technology (computer conferencing etc.).

There was considerably less discussion of **the role of industrialized country research** in supporting developing country research. A number of donors were turning to their own domestic research community to run or manage support to research in developing countries, with some complications in terms of setting priorities for research support.

There was also recognition that there were an increasing number of issues eg. environment, AIDS, which required global management and a **global view** of DR. These shared challenges may also raise the question of whether this type of research should be funded from national Official Development Assistance envelopes.

5. EXTERNAL SUPPORT TO DR

The Lewis study indicated that in 1984, the external support to research for development could be in the US \$1.3 - \$1.4 billion range. This was the best estimate available. Figures on allocation of resources to research in the developing countries themselves are much less precise, but it is clear that the external component represents perhaps as much as ten percent of the entire research budget and that this percentage varies considerably from one country to another.

Participants focused on the need for a regular series of data on external support to DR and possible ways of collecting it in view of the conceptual and definitional problems encountered by John Lewis. There was a strong feeling that there should be further action on this. It was suggested that

the World Bank, DAC and IDRC had a role to play. The World Bank volunteered the possibility of assistance to IDRC in terms of data collection and analysis in conjunction with DAC. The emphasis was on getting rough orders of magnitude rather than precise figures.

Discussion explored ways of promoting **collaboration** between donors. "It's going to be dismal if we don't start getting intelligent and begin to focus our resources as to what we do in Africa." To continue to work towards an overview of DR funding and priorities, it was recommended that there be further meetings of the same group - or some modified group - to pursue informal discussion on more specific issues or with more refined focus (say as an annual "seminar"). One suggestion was for a meeting to concentrate on donor support to DR in Africa. It was also suggested that the World Bank could play a leading role in Science and Technology, through there were constraints to it increasing its activities in this area. It was agreed that IDRC should continue meetings of this kind in an annual seminar format.

In terms of **improved information exchange**, it was recommended that donors should make greater efforts to share **policy and evaluation information**. Policy documents should be made more readily available. In evaluation, it was suggested that the DAC Expert Group on Aid Evaluation could review agencies' experience in funding research. There was also a request that donors make clearer how they judge success in support to research (eg. the CGIAR) "The way that success is measured may well change priorities".

The importance of information exchange was underscored by participants' recognition that providing support to DR is a very labour-intensive business, and that agencies could not individually obtain all the information they require. Smaller agencies reported that the bulk of their support to DR goes to multilateral research (eg. CGIAR and WHO) in part for this reason. A number mentioned increased interest in funding DR in developing countries under their bilateral programs. All participants acknowledged that they had an advocacy role in ensuring greater support of DR - both within their agencies and in developing countries. Better information flow would strengthen the case that could be made for this support by ensuring that available resources were used effectively.

SUMMARY OF RECOMMENDATIONS FOR ACTION

1. Future Overview discussions:

There was support for further exploration of broad, global issues relating to the evolution of a research system involving national, international and sectoral elements which could identify promising mechanisms or gaps in present patterns of DR funding. A global overview could best be pursued through informal, high-level meetings which might build towards consensus, and greater cooperation.

It was agreed that there should be further meetings or "annual seminars" of roughly the same group, to focus in future on more specific issues. IDRC will undertake to organize the next follow-up review meeting if participants continue to feel it worthwhile and will canvass them for suggestions as to theme.

2. Policy Information:

The meeting recognized the need for better cooperation in collecting and exchanging information, particularly on strategic directions.

- a. There was support for donors to **exchange policy documents** on research strategy and approaches.
- b. **Lessons learned:** It was suggested that the DAC Expert Group on Aid Evaluation should consider preparing an overview of results from evaluation of research projects and discussing the special problems connected with the evaluation of research support.

3. Information on Resources for DR:

a. **External support:**

(i) **Funding:** It was agreed that the World Bank and IDRC would provide support for further work, liaising with DAC or an appropriate mechanism to get better - but nevertheless approximate - figures on external funding of DR in developing countries and multilateral centres.

(ii) **Project:** Participants will continue the extension of existing project information systems (IDRIS, SPAAR etc.) and look to making their information more available to developing countries.

- b. **Information on developing country national DR resources:** Donors will continue to explore ways of assisting developing countries to improve their data gathering and analysis to improve strategic planning and choices. They should keep one another informed on proposed studies of research environment.

MEETING ON EXTERNAL SUPPORT TO DEVELOPING COUNTRY R&D

RÉUNION SUR LE FINANCEMENT EXTERNE DE LA R & D
DANS LES PAYS EN DÉVELOPPEMENT

OTTAWA - OCTOBER/OCTOBRE 14 - 15, 1988

LIST OF PARTICIPANTS/LISTE DES PARTICIPANTS

<u>NAME/NOM</u>	<u>TITLE/TITRE</u>	<u>ORGANIZATION/ORGANISATION</u>
Mrs. Tertit von Hanno Aasland	Head of Division, Planning Dept.	Ministry of Development Cooperation, Norway.
Dr. Ezio Andreta	Science & Technology Directorate	EEC, Belgium
Dr. Renato Batti	Development Assistance Directorate	EEC, Belgium
Dr. Bo Bengtsson	Director General	Swedish Agency for Research Cooperation with Developing Countries (SAREC), Sweden.
Dr. Nyle C. Brady	Senior Assistant Administrator, Science & Technology	Agency for International Development, U.S.A.
Mr. Arthur Brown	Associate Administrator	United Nations Development Programme, U.S.A.
Mrs. Margaret Catley-Carlson	President	Canadian International Development Agency, Canada.
Dr. Fakhruddin Daghestani	Advisor	Higher Council for Science and Technology, Jordan.
Mr. W. Doug Daniels	Director, Office of Planning and Evaluation	International Development Research Centre (IDRC), Canada.
Mr. Tim Dottridge	Senior Planning Officer, Office of Planning and Evaluation	International Development Research Centre (IDRC), Canada.
Mr. John Robert Evans	Chairman and Chief Executive Officer	Allelix Inc., Canada.
Monsieur Jean-François Giovanni	Vice-Directeur, Coopération au Développement et Aide humanitaire	Département fédéral des Affaires étrangères, Suisse.

<u>NAME/NOM</u>	<u>TITLE/TITRE</u>	<u>ORGANIZATION/ORGANISATION</u>
Professor Heitor Gurgulino de Souza	Rector	United Nations University, Japan.
Mr. Ivan L. Head	President	International Development Research Centre, (IDRC) Canada.
Dr. W. David Hopper	Senior Vice-President Policy, Planning and Research	The World Bank, U.S.A.
Dr. John P. Lewis	Professor	Princeton University, U.S.A.
Dr. Hans Peter Merz, Dipl.-Ing.	General Manager	GTZ, Federal Republic of Germany.
Professor Thomas R. Odhiambo	Director	The International Centre of Insect Physiology and Ecology, Nairobi.
Dr. Manmohan Singh	Secretary General	South Commission, Switzerland.
Mr. G. Storm	Head, Dept. for Education & Research	Ministry of Foreign Affairs, The Netherlands.
Ms. Elina Visuri	Counsellor, Chief of Section	Finnish International Development Agency, Finland.
Mr. Joseph Wheeler	Chairman	Development Assistance Committee, France.
Mr. Klaus Winkel	Head of Division, Evaluation & Research	Ministry of Foreign Affairs, Denmark.

Also invited, but unable to attend:

Minister Antonio Badini	Deputy Director General, Development Cooperation	Ministry of Foreign Affairs, Italy.
Monsieur Jacques Diouf	Secrétaire Général	Banque Centrale des Etats de l'Afrique de l'Ouest, Sénégal.
Mr. Aldo Ferrer		Argentina.
Monsieur Dieter Frisch (Replaced by Dr. Batti and Dr. Andreta)	Directeur Général Direction générale du Développement	EEC, Belgium.
Mr. Enrique Iglesias	President	Inter-American Development Bank, U.S.A.

PROPOSED AGENDA

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Meeting on external support to developing country R&D: providing research for 2000 and beyond.

Ottawa, October 14-15, 1988

1. The present state of Third World R&D and future perspectives.

Some issues:

(a) Heterogeneity and R&D Strategy: (i) There is increasing capability but also heterogeneity in developing country research. Some countries have a growing potential to compete in many areas of high technology research (eg. Korea). For these, the main question may be one of gaining improved access to industrialized countries' research (on a non-ODA basis). (ii) There is a much larger number of countries with little likelihood of being able to compete in the development of sophisticated knowledge and capital-intensive technologies. What kind of research strategy should they follow? (iii) A large group of countries may not even be able to have a minimum critical mass to tackle essential questions requiring economic and social research for policy formulation. What options exist for these countries? (iv) In the case of countries in (ii) and (iii) above, have they developed adequate strategic approaches to the use of the resources available for R&D? If not, should donors help to develop key research on R&D strategy?

(b) What is the track record of R&D and can existing weaknesses be overcome by continued donor support on a 'micro' basis - building capacity on a project by project basis?

(c) Do we need more information on areas such as resources available for research, the effectiveness of their use and the balance between policy and technological research?

2. The evolution of the size, number and focus of the multilateral research system.

Some issues:

(a) Over \$500 million has been identified as going to research in multilateral institutions - has there been consideration (except in the CGIAR case) of opportunity cost or priority?

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(b) Given the opportunity cost in terms of assistance to national research systems, should we continue to support the expansion of international and regional centres?

(c) What is the desirable evolution of those multilateral institutions which exist at present in terms of providing optimal support to developing countries' research? Is this being adequately addressed?

(d) Is there a need for organizations which can play a role in considering international research needs and priorities - as the CGIAR/TAC does for agriculture?

3. The future relationship between developing country research and that of the industrialized countries.

Some issues:

(a) Should industrialized countries be themselves building up their capacity to serve developing country research needs?

(b) What access do developing countries have at present to industrialized country R&D capacity? (cf. UNCSTD' 1979).

(c) What are the key areas of R&D in which developing countries are under-involved and where they could benefit most from industrialized country work? How can access be increased?

4. The role of external support to R&D.

Some issues:

(a) Are research-supporting organizations having undue influence on the topics being researched in developing countries? Have they encouraged developing countries to overinvest in R&D?

(b) Can external support help change the views of policy makers about the importance of an indigenous capability that can be sustained from national financial resources?

(c) Is there a need for improved information on current external flows to support Third World R&D? Are donors adequately informed of one another's initiatives?