International report

Comparative study of the impacts of donor-initiated programmes on research capacity in the south

Report to the Directorate-General for Development Cooperation (DGIS) Division for Research and Communication Ministry of Foreign Affairs, The Netherlands

Copies of this report can be obtained (subject to availability), free of charge, from the Publications Department (DVL/VM/SL), Ministry of Foreign Affairs, Postbus 20061, 2500 EB The Hague, The Netherlands.
Please quote order code OSDR 0456/E, and give your name and full postal address.
Multiple copies may also be requested, but please include a letter explaining the reason for the request.

Colophon

Published by
Ministry of Foreign Affairs

Policy Department
Cultural Cooperation, Education and Research Department
Division for Research and Communication (DCO/OC)
P.O. Box 20061 tel ++ 31 (0)70-34 86 480
2500 EB The Hague fax ++ 31 (0)70-34 86 436
The Netherlands E-mail <dco.oc@minbuza.nl>

Authors
Maria Cynthia Rose Banzon Bautista
Professor, Department of Sociology University of the Philippines,
Philippines

Léa Velho
Professor, Department of Science and Technology Policy
University of Campinas, Brazil
on secondment: Institute for New Technologies
United Nations University Maastricht, The Netherlands

David Kaplan
Director, Science and Technology Policy Research Center
University of Cape Town, South Africa

English editing
Valerie Jones

Graphic production
Jean Cloos Art Direction bv BNO, Den Haag

Print
Koninklijke De Swart, Den Haag

Cover photo's
Frank Fahrner/Frans Lemmens/Hollandse Hoogte

ISBN
90-5328-294-7

Ordercode
OSDR 0456/E

September 2001

Table of Contents

	Foreword Eveline Herfkens, Minister for Development Cooperation	vii
	Introduction: Revising North–South polarities Emeritus Professor Orlando Fals Borda	ix
	Research teams	xiii
	List of acronyms	xv
	Executive summary	1
1	**Introduction**	19
1.1	Background and Organization of the Report	19
1.2	The Development Context of North–South Research and the Conceptual Framework of the Study	20
1.3	Objectives and Research Questions	25
1.4	Research Process and Methodology	26
	1.4.1 Programme selection	27
	1.4.2 Data sources and validation of findings	29
2	**Contexts of the programmes investigated**	31
2.1	AFRICA	31
	2.1.1 Political economic contexts and development discourses	31
	2.1.2 Academic and research contexts	36
	2.1.3 The programmes in context	39
2.2	ASIA	44
	2.2.1 Political economic contexts and development discourses	44
	2.2.2 Academic and research contexts	47
	2.2.3 The programmes in context	49
2.3	LATIN AMERICA	55
	2.3.1 Political economic contexts and development discourses	55
	2.3.2 Academic and research contexts	59
	2.3.3 The programmes in context	60
3	**Modalities of donor-initiated research capacity building in the South**	69
3.1	Constructing Modalities: Preliminary Issues and Qualifications	69
3.2	Institutional Arrangements and Administrative Mechanisms: Autonomy, Accountability and Sustainability	76
3.3	Building Capacity for Development-Oriented Research: Relevance, Location Specificity and Multidisciplinarity	87
	3.3.1 Discursive context	87
	3.3.2 Relevance, location specificity and multidisciplinarity	91

3.4	Building Capacity for Development-Oriented Research: Outputs, Quality and Evaluation	101
	3.4.1 The impacts of the programmes on individuals, institutions and state/national policies	101
	3.4.2 Quality and evaluation	112
3.5	Linkages between Donor-Initiated Programmes	115
4	**Concluding remarks**	**119**
	References	**129**
	Notes	**133**

Foreword

The foundation for this report was laid during a workshop held in 1997. Twelve Southern scholars, invited to advise on how to set up a study of the the Multi-Annual Multidisciplinary Research Programmes (MMRPs), suggested that a comparative approach be adopted and that the study include research programmes comparable to the MMRPs and funded by different donors. They also suggested that it be conducted from the perspective of the realities on the ground in the South. They further advised, in the spirit of the MMRPs, that it be conducted autonomously by Southern scholars.

Having read the report, I feel convinced that autonomy is possible and that it works. As the authors state, autonomy has been a key factor in explaining the strides made by the MMRPs. Since they were autonomous and had responsibility, the owners could make the most of the available creativity, expertise and commitment, while applying the flexibility needed to respond to specific demands and conditions. The authors rightly stress the importance of local accountability. The results to date indicate that a truly local and sustainable research capacity can be established in developing countries, provided that we as donors are responsive rather than prescriptive.

This report has a lot more to tell. It gives many new, interesting insights into the complexities that emerge if the research capacity to be developed is to be of relevance to social needs. In this context, the authors discuss the limitations of mainstream opinions on research quality. At the same time, they give a new meaning to concepts such as demand orientation. In fact, the authors critically analyse the whole concept of research capacity, and highlight the need to develop new indicators that do greater justice to development-related research capacity.

The report holds up a mirror. Stimulating and wide-ranging, its contents provoke reflection and debate, as is immediately evident from the introduction written by Professor Orlando Fals Borda. I invite readers to join this debate and take up the challenges we are facing. We are committed to research that is of relevance to the social issues that confront the poor.

Finally, I wish to thank all who have contributed to this study. My special thanks are due to Professors Cynthia Bautista of the Philippines, David Kaplan of South Africa and Lea Velho of Brazil who dauntlessly accomplished the task in hand. My thanks also go to the members of the national research teams, all those who provided information and all who have contributed to this study in one way or another.

Eveline Herfkens
Minister for Development Cooperation of the Kingdom of the Netherlands
The Hague

Introduction: Revising North–South polarities

International critiques of development work, which may contain interesting ideas but are often devoid of thrust, are easy to find in the literature. Self-critiques originating from non-governmental organizations (NGOs) and other institutions in countries in the North are rare, and usually apologetic. To find institutional criticism that combines honest self-interest and respect for the viewpoints of others, especially those who are regarded as the objects or targets of development in the South, means approaching virtually unknown territory. But it is a worthwhile intellectual and technical venture.

Whether the new knowledge that is gained is also useful will depend on the collective will to sustain the necessary social change on the part of those established in the North, as well as on those struggling in the South, probably more so in the South. Such a project then acquires a universal character.

The present comparative study of the impacts of donor-initiated programmes on research capacity in the South, sponsored by the Division for Research and Communication, Directorate-General for Development Cooperation (DGIS), seems to me a good example of the third, more challenging type of research. The study merits attention because of its strategic outlook as it ventures beyond the tired routine of the "trickle-down" development discourse.

The secret of the study's adventurous mood is a socio-administrative invention, which is very much in line with the imaginative and pragmatic tradition of the Dutch people, called the Multi-annual Multidisciplinary Research Programmes (MMRPs). Since 1994, after a lengthy periods of preparation, these programmes have been established in seven post-colonial societies in Africa, Asia and Latin America where DGIS offers development assistance.*

There is no need for me to recapitulate the theoretical and practical foundations of the MMRPs, since this task has been competently performed by the field researchers and three scholars from Brazil, the Philippines and South Africa, representing different social disciplines, who carried out the present analysis. However, I would underline the fact that the study questions the ethnocentric belief that Euro-American scientific paradigms and "international standards" are unique or superior, since all efforts of this type depend on concrete social, historical, political and economic contexts. What emerges from the study is the need for Southern scholars and activists to combat intellectual colonialism, and to join forces to develop more satisfactory symmetrical or convergent paradigms related to the local, the indigenous, the everyday, the immediate and the irregular, i.e. details that are still generally unknown because they are peripheral to modern science.

* Since 1998 two further MMRPs have also been established in Egypt and Mali.

Suffice it to say that it was a wise and opportune decision to proceed with the task of studying the MMRPs. At a workshop in Leusden in 1997, a group of scholars from the South started to bring together the intellectual elements of the study, following a directive from the then Minister for Development Cooperation, Jan Pronk. The workshop participants were invited to consider how such a study could generate critical reflection on the Netherlands policy, as represented by the MMRPs. They advised that the study be broadened into a comparative study, including research programmes supported by other donors. Here I will try to reflect only on some related aspects, which I hope will be useful to continue this important learning experience and to share its lessons with other institutions and social actors worldwide.

My first concern may be considered a purely nominal problem, even though there is now wide agreement on the importance of discourses for policymaking. The present study was not afraid of addressing the problem of technology transfer among open systems. The authors responded properly when they approached it with the analytical concept of "alternative/sustainable development" viewed as a result of the quest for an "alternative mode of knowledge production". The reasoning behind this quest, as reported from the field, appears sound to me. Such knowledge is experiential and sensitive to local contexts, it is committed to the users, and it responds to the principle of bringing together diverse frames of reference for trial, observation and data gathering, including multidisciplinary and holistic exercises, and above all combining academic and popular knowledge and techniques.

Therefore, the emerging research practices, now more visible and accountable, feed into an open-ended process of social transformation that goes beyond so-called "development". This is something that can be grasped, even by Westerners, and has been absorbed into local languages and dialects like Swahili, Maya or Huitoto, where the word "development" has been variously translated as "awakening" or "standing up and advancing". I am sure that ordinary people from the seven countries included in the study would likewise readily understand – and even act upon – such dynamic meanings.

The present study helpfully identifies some methodological steps that are suitable for study, action, transformation and empowerment by and through programmes like the MMRPs. They are those derived from the tenets of participatory action research (PAR). Of course this is not surprising to me, but it may be astonishing to staid academics, experts and bureaucrats. It is clear that the authors arrived at this conclusion after a careful process of comparative work. They are critical of positivist, unilinear and non-committed social research techniques, and rightly so. For example, they propose to regard local peer groups as referents to determine whether the work done has been effective or not, and whether the knowledge gained has indeed been useful in the field and among the actors involved, where it should count most.

Thus broader criteria for scientific validation, objectivity and pertinence are produced, and a participatory research orientation is established along two continua: from academic/fundamental to applied/action research, and from macro policy to a focus on local issues.

The temptation to generalize on this sound foundation is great, but the authors prudently avoid it. Instead, they elaborate on the infinite cultural and ideological variety produced by the specific contexts that determine the social, political and economic characteristics of groups and societies. This fact of "contextuality" is often overlooked by policymakers who like to simplify, intervene and homogenize, according to their own vision, that which is inherently rich and complex. The need to respect local contexts is repeatedly stressed throughout the report. It is a warning against the current destructive trend towards economic globalization.

The policy implications for DGIS and the donor community in general are also clearly delineated. They are major and wide-ranging. For one, the donor agencies should continue this type of long-term work and design ways to disseminate it throughout the world, while discouraging anecdotal accounts with little solid basis. To this end, DGIS could intensify the systematic codification of the experience gained by the MMRPs. Only one programme (in Kerala, India) is doing it; yet with participatory research procedures, talented local people who are able to use their own initiative, who live close to the problems at hand, could be enlisted for good and quick intellectual gain. Seniority may not be an asset in these circumstances. The accumulation of such valid knowledge is indispensable for PAR to mature even further, but also for introducing the results to a wider audience that is thirsty for new participatory methodologies.

On this point it is important that the research trio continue to work on the issue of programme sustainability. They have already established the factors that are necessary for sustainability: the autonomy of the organization, the model of research steering and management, and the critical mass of researchers built up over a period of time. The authors point also to a logical way to pursue the goal of sustainability, when they suggest that the MMRPs have a choice between developing a research movement or a research organization.

In this regard, I feel that an earlier idea to establish to a participatory university would play well with proponents of the emerging worldview who want to make knowledge pertinent to the communities in need, and to those who have been the victims of neglect, injustice and exploitation. The polarization between North and South would then be easier to handle and understand, and would give way to truly cooperative work in theory and practice.

Finally, I have a minor disagreement with the initiative to establish a forum to examine programmes of this kind. The resources that would be spent on such a potential tower of Babel could be better employed in furthering practical projects in the South that are in harmony with the principle of North–South cooperation as a horizontal relationship, as demonstrated in the present report. The joint reflection that such a forum would invite would be better served by inputs for real transformations for justice and peace in regions where the effects of rampant capitalism and other inhuman practices have been most severe, including the seven countries examined in this study. Financing a dissemination project with the orientation championed here, as well as fellowship exchanges or networks among members of Southern institutions and universities (not only with the North, and with no "sandwich systems"), would be more likely to satisfy the purposes of sharing than the proposed forum.

Professors Bautista, Kaplan and Velho, as well as DGIS, should be highly commended for having contributed so much towards the attainment of these worthy goals.

Orlando Fals Borda
Emeritus Professor, National University of Colombia, Bogotá

Research teams

AFRICA

Professor David Kaplan: coordinator

Tanzania

Country researcher:	Dr Christine Minja-Trupin
Research assistant:	Michael Trupin

Uganda

Country researcher:	Dr Franklin Muyonjo

ASIA

Professor Cynthia Banzon Bautista: coordinator

Bangladesh

Country researchers:	Dr Rita Afsar
	Sanjana Jahana

India

Country researcher:	Professor K.K. George
Research assistants:	Dr N. Ajith Kumar
	Reji Raman
	K.K. Krishnakumar
	Jeanne George

Vietnam

Country researchers:	Thach Can
	Dr Nguyen Thanh Ha
	Tran Dinh Toan
	Le Thi Quy
	Pham Kien Thiet

LATIN AMERICA

Professor Léa Velho: coordinator

Bolivia

Country researcher:	Dr Maria Carlota de Souza Paula
Research assistant:	Ms Adriana Barreiro Diaz

Nicaragua

Country researcher:	Dr Fabiano Toni
Research assistant:	Adriana Roa Celis

List of acronyms

ACBF	African Capacity Building Foundation (Uganda)
ADESO	Asociación para el Desarollo Sostenible de las Segóvias (Nicaragua)
AERC	African Economic Research Consortium (Uganda)
APNLBP	Andhra Pradesh–Netherlands Biotechnology Programme (India)
BRAC	Bangladesh Rehabilitation Assistance Committee
CDR	Centre for Development Research (Copenhagen, Denmark)
CDS	Centre for Development Studies (Trivandrum, Kerala, India)
CEBEM	Centro Boliviano de Estudios Multidisciplinarios (Bolivia)
CEDLA	Centro de Estudios para el Desarrollo Laboral y Agrario (Bolivia)
CEMAR	Centre for Natural Resources Management (Bolivia)
CEPLAG	Centro de Planificación y Gestión (Bolivia)
CERES	Centro de Estudios de la Realidad Económica y Social (Cochabamba, Bolivia)
CESU	Centro de Estudios Superiores Universitarios, UMSS (Bolivia)
CIDA	Canadian International Development Agency (Ottawa)
CIDCA	Atlantic Coast Centre for Research and Documentation (Nicaragua)
CIDOB	Consejo de los Pueblos Indígenas de Bolivia (Council of the Indigenous Peoples of Bolivia)
CIGEO	Centro de Investigaciones en Geociéncias (Nicaragua)
DAC	Development Assistance Council (OECD)
DANIDA	Danish International Development Agency
DGIS	Directorate-General for Development Cooperation (The Netherlands)
DFID	Department for International Development (UK)
EIB	Bilingual Intercultural Education (Bolivia)
ENRECA	Enhancing Research Capacity Programme (Tanzania)
EPRC	Economic Policy Research Centre (Uganda)
ERB	Economic Research Bureau (Tanzania)
EU	European Union
FAO	United Nations Food and Agriculture Organization
FSRP	Farming Systems Research Programme (Vietnam)
FTPP	Forest, Trees and People Programme (Bolivia)
GMC	Gender Management Committee (Tanzania)
GDP	gross domestic product
GNP	gross national product
GTZ	Deutches Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
HDI	human development index
HIPC	highly indebted poor countries
HPI	human poverty index
IDRC	International Development Research Centre (Canada)
IDS/WSG	Institute of Development Studies, Women's Study Group (Tanzania)
IPE	Institute of Public Enterprises (Andhra Pradesh, India)
IMF	International Monetary Fund

INIES	Nicaraguan Institute for Economic and Social Research
IPE	Institute of Public Enterprises (Andhra Pradesh, India)
IRA	Institute of Resource Assessment (Tanzania)
IRCT	Integrated Rural Technology Centre (Kerala, India)
KRPLLD	Kerala Research Programme on Local Level Development
KSSP	Kerala Sastra Sahitya Parishad (Kerala Science Library Society, India)
MAP	Monitoring Adjustment of Poverty (Bangladesh)
MISR	Makerere Institute of Social Research (Uganda)
MMRP	Multi-annual, Multidisciplinary Research Programme
MOSTE	Ministry of Science, Technology and Environment (Vietnam)
NGO	non-governmental organization
NISTPASS	National Institute for Science and Technology Policy and Strategic Studies (Vietnam)
NITLAPÁN	Instituto de Investigación y Desarrollo, Universidad Centroamericana (UCA), NITLAPÁN - Tiempo de Sembrar (Nicaragua)
NURRU	Network of Ugandan Researchers and Research Users
OCS	open competitive system
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
PAC	programme advisory committee
PAR	participatory action research; alternatively PRA
PER	public expenditure review
PIEB	Programa de Investigación Estratégica en Bolivia
PIRN	Proyecto de Investigaciones en Recursos Naturales (Bolivia)
PRA	participatory research approach
PROEIB	Programa de Educación Intercultural de Bolivia
PRPA	Programme for Research on Poverty Alleviation (Bangladesh)
RED-BRAC	Research and Evaluation Division, Bangladesh Rural Advancement Committee (Bangladesh)
REPOA	Research for Poverty Alleviation (Tanzania)
SAREC	Swedish Assistance for Research and Cooperation
SC	steering committee
SIDA	Swedish International Development Agency
SUDESCA	Consortium of three research institutions in Costa Rica's National University, the University of El Salvador, the Universidad Nacional Autonoma (Nicaragua) and the University of Aalborg (Denmark)
TANU	Tanganyika African National Union
TAS	Tanzania Assistance Strategy
TASAF	Tanzania Social Action Fund
UCA	Universidad Cetroamericana (Nicaragua)
UDSM	University of Dar es Salaam (Tanzania)
UMSA	Universidad Mayor de San Andrés (La Paz, Bolivia)
UMSS	Universidad Mayor de San Simón (Cochabamba, Bolivia)

UNA	Universidad Nacional Agraria (Nicaragua)
UNAN	Universidad Nacional Autonoma (Nicaragua)
UNDP	United Nations Development Programme
UNI	Universidad Nacional de Ingeneria (Nicaragua)
USAID	United States Agency for International Development
VISED	Vietnam Sustainable Economic Development
VNRP	Vietnam–Netherlands Research Programme (Vietnam)
WRDP	Women's Research and Documentation Project (Tanzania)

Executive summary

Background

The plan for a comparative study of donor-initiated capacity building in the South emerged from the 1997 Leusden Workshop organized by the Research and Developing Countries Division of the Directorate-General for Development Cooperation (DGIS). The workshop organizers hoped to conceptualize a study that would enable them to obtain feedback on the implementation of the new DGIS policy regarding North–South collaboration in the area of science and technology. Initiated in 1992 by the then Minister for Development Cooperation, Jan Pronk, the main goal of the policy was to link research more closely to the needs and interests of the developing world, particularly the poor. The designers of the policy attributed the insufficient orientation of Southern research toward local societal problems to the prevailing asymmetric character of North–South research collaboration. They therefore sought to minimize the possibility of Northern researchers dominating collaboration efforts with Southern partners by calling for a shift in the key responsibilities – for agenda and priority setting, the conduct of the research and financial accounting – from the North to the South.

The policy that emerged marked a radical departure from traditional practice, and resulted in the creation of the Multi-annual, Multidisciplinary Research Programmes (MMRPs) in Africa, Asia and Latin America. For each MMRP, addressing the needs of the society concerned entails focusing on research problems that will have consequences for development throughout the South. The choice and conduct of development-oriented research demands an understanding of a problem from the perspectives of many stakeholders, often with conflicting interests. Such a nuanced grasp of issues and problems, in turn, requires inputs from researchers in various disciplines and branches of knowledge. More important, it requires interactions with users – those who will utilize the findings to formulate development-oriented policies or actions, as well as those who stand to benefit from or suffer their consequences. In summary, each MMRP as designed is a research capacity-building programme that is managed autonomously by the Southern partner, and which provides long-term support for demand-driven, location-specific, multidisciplinary research for sustainable development.

Reflecting on the features of the MMRPs, the participants of the 1997 Leusden workshop noted that various other donors are funding research capacity building programmes with similar characteristics. Although they may not grant long-term support or full autonomy to their Southern partners, many like-minded donors also support demand-driven, location-specific and multidisciplinary research for sustainable development. The common thrust of the MMRPs is rooted in the changes in development perspectives over the last 50 years. By the 1990s, a number of factors had provided an impetus for stakeholders in the South to define their own development agendas, and to analyse and address concrete issues appropriately. Among these factors were the democratization of many Southern countries, the increasing

range of issues requiring location-specific interventions (e.g. environmental concerns), neo-liberal advocacy for linking free markets to democracy, the demand for participatory governance and the rise of civil society groups. Through appropriate funding mechanisms, donors supported these emerging views on development and capacity building. They helped mainstream alternative development perspectives and participatory research paradigms in universities and research institutes by encouraging academic researchers to forge links with external agencies, including grassroots organizations.

Objectives and methodology

In the light of converging perspectives among donors, the aim of the research conceptualized at the Leusden workshop was to compare the MMRPs with other capacity building programmes in the seven countries where these programmes are operating. From the outset, the purpose of study was to gain insight into the programmes, to understand their genesis and to determine how they have changed in the appropriate contexts of time, geography, political economies and cultures, including the prevailing research and academic cultures. The researchers were aware that their task was not to evaluate the programmes or to render judgements on whether one mode of research collaboration was superior to another, but to examine the similarities and differences between the donor-initiated programmes and their expression at the level of implementation. Within this rather broad objective the study attempted to answer the following questions:

- Are the asymmetries reflected in the "conventional" programmes of research cooperation also present in the cases under study?

- From the perspective of the recipient countries, is the Netherlands policy for development cooperation, as contained in the MMRPs, any different from the "conventional" forms of North–South cooperation, or from the policies recently adopted by similar agencies? What are the differences and similarities between these policies, specifically in terms of the characteristics or attributes of the programmes: their autonomy in decision making (control over policy, management and budget), their duration, and their focus on demand-driven, multidisciplinary, location-specific research and participatory practices?

- Are the programmes implemented by the different donors producing the desired results? Here, the focus is on the various types of **research capacity building** (institutional and individual; conducting and managing research; research appreciation and use); the production of results of **quality and relevance** for achieving development objectives; and the establishment of scientific relationships with other countries (**international research collaboration**), etc.

- Is the Netherlands policy applicable only to some types of research, particularly those involving specific regional needs, or could it be adopted in a more general way in other forms of North–South research cooperation?

Research in the three continents commenced with regional conceptualization workshops, immediately followed by fieldwork in each of the seven countries. The preliminary phase of the field research focused on identifying and selecting programmes that at least shared the broad objectives of the MMRPs and some of their attributes. To that end, the research support situations in the MMRP countries had to be "mapped" from the local rather than the donors' perspective. The mapping exercise revealed that most external agencies fund research and research institutions directly, according to the agencies' own priorities. Some of them fund government research institutions or universities, whereas others support short-term action research conducted by NGOs. In view of this, the country research teams, in the light of the locally available options, applied a set of criteria that varied slightly from one country study to another. Some of the obvious variations in the choices of comparators were due to the attributes emphasized, which reflect the political economic and academic contexts of the countries and the character of the MMRPs.

The programmes selected focus explicitly on research capacity building. Most of them entail a long-term commitment on the part of the donor agency. They enjoy varying degrees of autonomy, ranging from minimal with respect to decisions on what research questions will be addressed and how the research will be conducted, to full autonomy with respect to the use and allocation of funds. The programmes aim to enhance capacity either for policy studies or applied field-based research that is oriented towards specific development issues. They vary in research orientation along two scales: one a continuum from academic/fundamental to applied/action research, and the other a continuum from a macro-policy orientation to a focus on purely local issues, among other differences. Nevertheless, all the selected programmes support and advocate the need for research to produce concrete applications that will benefit specific end users, although the intended users vary from one programme to another.

Country contexts and programmes

Although programmes funded by the same donors across countries had common features, their implementation nevertheless varied according to the political economic contexts and state of science and technology in the respective countries. On the other hand, similarities in the operationalization and implementation of particular programmes across continents can be traced to features that are common to those countries (e.g. the significance of Marxist-inspired activist discourses and practices in Asia and Latin America).

All of the seven countries covered by the research – Tanzania and Uganda in Africa, Bangladesh, India and Vietnam in Asia, and Bolivia and Nicaragua in Latin America – are post-colonial societies. The political histories of most of these countries since 1945 have been characterized by political turmoil and instability in the form of a war of reunification in Vietnam, revolution and counterrevolution in Nicaragua, and military coups in Bolivia, Bangladesh and Uganda. India and Tanzania have enjoyed greater political stability compared with the other five countries, although a socialist ideology gained ground in Tanzania and in parts of India, where the Communist Party won government seats through the ballot. A culture of activism, influenced by Marxist-inspired Leftist struggles in India and to some extent in Bangladesh, also thrives in Bolivia and Nicaragua.

Interestingly, these last four countries have witnessed the proliferation of NGOs and grassroots organizations in the last three decades on a scale that is certainly more significant than in Vietnam or the African countries of Uganda and Tanzania. The rapid growth of activist NGOs in the Latin American and the other Asian countries accounts for the salience of participatory frameworks and grassroots involvement in development programmes. This also partly explains the more widespread acceptance of participatory research approaches in Bangladesh, India, Tanzania and Uganda, and the infusion of participatory principles even in academically oriented research capacity building programmes.

In Vietnam and Tanzania, NGO networks and Left-inspired activism in the tradition of South Asia or Latin America have not prospered, despite the socialist ideology of the dominant political groups in both countries. In Vietnam, the militaristic organization of society due to the exigencies of the war of reunification and the subsequent reconstruction, and in Tanzania, the absence of any impetus to further develop a Left-leaning grassroots movement, given the control of the state by a socialist-oriented leadership immediately after independence, explain the relatively lacklustre development of NGOs during the 1970s and 1980s in these two countries.

At different points in their post-World War II history, all the countries included in the study have experienced serious economic crises. As a consequence, all of them have undergone structural adjustments that required the adoption of neo-liberal, private sector driven economic policies, albeit with varying levels of success in terms of implementation. Economically, the countries studied are among the world's poorest nations. In 1997, their GNP per capita was below the average for developing societies as a whole. With the exception of Bolivia, the per capita incomes of the countries range from US$ 260 (the per capita GNP of the least developed countries) to US$ 410. Although Bolivia has fared better than the others in terms of its per capita GNP, it is still among the poorest countries in Latin America.

As expected, the levels of poverty are significant in all seven countries. Thus, poverty alleviation is high on the agendas of all the governments concerned, and remains a dominant discourse within the development community. In addition to poverty alleviation, the rhetoric of neo-liberal democratization has been juxtaposed, albeit uneasily for most countries, with the revolutionary or nationalist discourses of the post-World War II period. Apart from poverty alleviation, democratization and local development, the other discourses that have shaped the research thrusts and interests of the programmes in the seven countries reflect their salient problems, e.g. indigenous peoples in Bolivia and the transition to a market-oriented economy in Vietnam.

Despite differences in the academic contexts and cultures of the countries included in the study, they share many common problems. Low enrolment rates at the pre-collegiate, especially at the secondary level, problems of infrastructure, and the lack of good elementary and high school teachers plague most of the countries, although the sub-Saharan African nations and Nicaragua suffer the most in this respect. Problems in the quality of secondary education are reflected in the declining standards of reputable universities in most of the countries, which focus primarily on teaching. Currently, even though the universities in the seven countries engage in very little research, they all have groups of highly trained researchers. In Asia, these researchers are found in specialized research institutions, with a few based in the universities. In Latin America and Africa, they work in research centres, NGOs and universities. Comparing research communities with a capacity to develop different thrusts, those in the Asian and to some extent in the Latin American countries are bigger than in Tanzania and Uganda. With the exception of Nicaragua, it would seem that the countries in the other continents are more likely to possess a critical mass of researchers and a better developed research culture than the sub-Saharan African countries included this report, although there are differences in academic traditions and research orientations.

The programmes included in the study are as follows:

AFRICA

Tanzania	**REPOA**	Research for Poverty Alleviation, the local MMRP
	ENRECA	Enhancing Research Capacity
	WRDP	Women's Research and Documentation Project
	IDS/WSG	Institute of Development Studies, Women's Study Group
Uganda	**NURRU**	Network of Ugandan Researchers and Research Users, the local MMRP
	EPRC	Economic Policy Research Centre
	MISR	Makerere Institute of Social Research

ASIA

Bangladesh	**PRPA**	Programme for Research on Poverty Alleviation, the local MMRP
	RED-BRAC	Research and Evaluation Division of the Bangladesh Rural Advancement Committee
	MAP	Monitoring Adjustment of Poverty
India	**KRPLLD**	Kerala Research Programme on Local Level Development, the local MMRP
	APNLBP	Andhra Pradesh–Netherlands Biotechnology Programm
	UNDP	Strategies and Financing for Human Development
Vietnam	**VNRP**	Vietnam–Netherlands Research Programme, the local MMRP
	SIDA/SAREC FSRP	Farming Systems Research Programme
	VISED	Vietnam Sustainable Economic Development

LATIN AMERICA

Bolivia	**PIEB**	Programa de Investigación Estratégica en Bolivia, the local MMRP
	FTPP	Forest, Trees and People Programme
	PIRN	Proyecto de Investigaciones en Recursos Naturales
	SIDA/SAREC	Programmes in two Universities and two research centres
	PROEIB	Programa de Educación Intercultural de Bolivia
	CEPLAG	Centro de Planificación y Gestión
Nicaragua	**ADESO**	Asociación para el Desarollo Sostenible de las Segóvias, the local MMRP
	IDRC	support to four NGOs
	SIDA/SAREC	Programmes in four local universities
	SUDESCA	a programme funded by DANIDA, the Danish cooperation agency
	NITLAPÁN	a local research institute

With the exception of the MMRPs and the EPRC in Uganda, all the programmes in Africa are university-based. The research programmes selected for Latin America, on the other hand, consist of six university-based (SIDA/SAREC-Bolivia, PROEIB, CEPLAG in Bolivia, and NITLAPÁN, SIDA/SAREC-Nicaragua and DANIDA-SUDESCA in Nicaragua) and five NGO-based programmes (PIEB, FTPP, PIRN in Bolivia, and ADESO and IDRC in Nicaragua). Furthermore, with the exception of SIDA/SAREC-Nicaragua, which is building research capacities in the natural sciences and engineering, the programmes are mostly social science based. In Asia,

only one programme is university-based (SIDA/SAREC's FSRP). The rest are located within research institutes/centres or in independent organizations.

The study reveals a wide range of research directions. Donor agencies began to support participatory and applied research models in the 1980s. Programmes based on these models have been better received in countries where development NGOs and an activist culture thrive (e.g. KRPLLD and APNLBP in India; PRPA and RED-BRAC in Bangladesh; VNRP in Vietnam; ADESO, IDRC and NITLAPÁN in Nicaragua; and PIRN and FTPP in Bolivia), than in Uganda and Tanzania. Nevertheless, in Africa, NURRU and WRDP/IDS/WSG have concentrated on capacity building for Ugandan and Tanzanian researchers, respectively. In all countries, most of the programmes that emphasize academic concerns, i.e. the conceptual and methodological bases of research, are also aware of and sensitive to the needs of end users. Examples include SIDA/SAREC's FSRP and the VNRP in Vietnam; PIEB, PROIEB, CEPLAG and SIDA/SAREC in Bolivia; ENRECA and REPOA in Tanzania; and SIDA/SAREC and SUDESCA in Nicaragua. Apart from pursuing participatory research and academic research with inputs from end users on the ground, the other programmes are oriented toward policy (VISED in Vietnam, the UNDP programme in India; MAP in Bangladesh; REPOA in Tanzania; and MISR and EPRC in Uganda).

For comparative purposes, four of the programmes studied were eventually dropped, although the lessons from them have been incorporated into this report. The programmes that do not figure directly in the discussion are RED-BRAC (Bangladesh), NITLAPÁN (Nicaragua), EPRC (Uganda) and MISR (Uganda). These are research units with multiple donors rather than programmes, and involve a distinct set of research and capacity building activities that would not exist without donor support.

Asymmetry, autonomy from donors, institutional autonomy and sustainability
In terms of institutional arrangements for capacity building, the programmes can be classified into two modes. Mode I programmes are linked to and are administered by existing academic institutions, i.e. universities or independent research centres, and Mode II programmes are independent. Except for WRDP in Tanzania, all the programmes funded by SIDA/SAREC, DANIDA, GTZ and Belgium fall under Mode I. In these cases, donor-supported activities are clearly distinguishable from the other activities carried out by the universities or research institutes, and the local coordinators are based in the institutions involved. In contrast with these university-based programmes, all the DGIS-funded programmes (the seven MMRPs and APNLBP) and a few other programmes (the IDRC-supported VISED and MAP programmes, FTPP and PIRN) have bypassed established institutional structures and formed their own institutional arrangements, although many of them are hosted by existing research centres. In principle, they are independent of their host institutions. Although some MMRPs have sought independence, this has not been achieved

completely in Bangladesh, Kerala and Vietnam. In quite a few cases, the programme organizers found it difficult to find a host institution that would allow complete independence, possibly out of concern for their own reputations. Operating independently requires programmes to acquire a range of management, organizational and training/capacity building skills, and to establish their own systems of rules and procedures.

Do Northern partners continue to wield as much control over programmes as they did when the first conventional programmes were established in the 1960s and 1970s? The answer is a qualified no. For the programmes analyzed, donor control and, conversely, autonomy, is manifested at different levels. Common to all programmes, including the MMRPs, is donor control over decisions regarding specific regions or countries to locate the programmes in and the broad field of knowledge or area of activity to be supported. Particular to the MMRPs, the establishment of steering committees composed of researchers and representatives of government and grassroots organizations was an absolute DGIS requirement in order to ensure their autonomy.

Beyond these areas of control, the autonomy of local partners with respect to the choice of research themes and topics within a broad research field varies across programmes. A number of programmes (FTPP, PIRN and PROEIB in Bolivia; MAP in Bangladesh; VISED in Vietnam; APNLBP in India; and the Women's Studies programmes in Tanzania) are "thematic", meaning that donors had made earlier decisions regarding the "themes" to be pursued. Despite this, the programmes have the freedom to decide on specific research problems and have autonomy at the implementation and management levels, although they are subject to monitoring mechanisms established by the donors. The more academically oriented programmes are granted autonomy from donors to identify and select specific research topics and, in some instances, themes and priorities. They do have to meet certain institutional criteria and practices, however, so that their autonomy in designating and managing programme funds is circumscribed.

There is general agreement among the country teams that the MMRPs, the UNDP programme in India and the APNLBP have a greater degree of autonomy from their donors than the comparator programmes. Interestingly, it is only in the DGIS-supported programmes (MMRP and APNLBP) that the donors are not represented in the governing bodies, an observation that is consistent with the DGIS policy of granting full autonomy to Southern partners in the determination of research directions and in allocating funds. In contrast, a foreign programme adviser and a representative of the funding agency sit on the boards of the two IDRC programmes in Asia, VISED and MAP. The Bolivian Country Report observes that in some cases the donors participate in administrative and executive committees or in some aspects of the management of FTPP and PIRN.

The full autonomy of the MMRPs and the APBLNP from DGIS is assured by the existence of multi-stakeholder steering committees (SCs) and complementary bodies such as programme advisory committees (PACs). Multi-stakeholder representation in the policymaking and advisory bodies is deemed crucial for achieving an autonomous process of direction setting that is attuned to the conditions in developing societies. But ensuring representation in the highest decision-making bodies has been easier to achieve in some programmes than in others. Compared with the APNLBP, which has worked well with a biotechnology committee of scientists and representatives of relevant government agencies and NGOs, the MMRPs have had varying levels of success in this area.

Comparing the university-based programmes with those that are either independent or autonomous of but lodged in host institutions, the latter enjoy greater autonomy. Programmes based in universities tend to be encumbered by university regulations and constraints, and are more vulnerable to academic politics. Among most of the programmes outside universities, there is no evidence of any significant difference in the level of autonomy enjoyed by those that operate independently from any established institution and those that are lodged in institutions. Systems of governance involving highly respected members of the societies concerned, the specificity of programme frameworks, a programme's participation in international networks, or the novelty of its research agenda have prevented host institutions from overturning major decisions of the programmes they host. MAP is a case in point. The paradigmatic nature of the underlying theoretical framework of the programme's efforts to monitor poverty in Bangladesh, the specificity of its methodology, and the fact that it is a part of an IDRC-funded cross-country programme allow it to enjoy autonomy.

Regarding the most suitable arrangements for purposes of institutional autonomy, there is a trade-off between being an independent programme and one that is lodged in a host institution. For all the non-university-based research programmes, the credibility of their host institutions has contributed to their acceptance by the wider development community. For instance, PRPA's association with the Grameen Trust has helped the programme establish its reputation in circles working on poverty alleviation in Bangladesh. Ironically, PRPA also demonstrates the need to balance the gains from being hosted by a reputable institution and autonomy from it. Informants in Bangladesh expressed their concerns about some aspects of the relationship between the Grameen Trust and PRPA, and its influence on the long-term development of the programme (e.g. the NGO had applied its own administrative procedures and salary scales to programme operations, and appointed members of the PRPA steering committee, chair and programme director). On the other hand, programmes that are not lodged in an institution do not have to weigh the costs (to autonomy) and benefits of institutional affiliation. Independence, however, may lead to problems of accountability if the programme has not developed a significant

community – which could be a host institution, a research community, concrete local communities, or the imagined community of development workers in a particular region or country. This was the case with NURRU in Uganda, when it suffered serious management problems in an early phase of its development.

The issue of institutional autonomy is linked to the question of sustainability. From one point of view, programmes based in universities, research centres, government agencies or NGOs have greater promise of sustainability because both the networks of the researchers they have produced and the institutions they are part of could be expected to work for their survival and continuation. From another perspective, however, programmes that are not bogged down by the baggage of organizational and academic responsibilities have more opportunities to establish a research track record that will ensure their attractiveness to funding agencies (e.g. REPOA).

When discussing the issue of sustainability, however, the question that arises – which this report cannot adequately address – is what exactly is being sustained? Is it the programme as an organization? Is it the model of research management the programme operationalizes, and the underlying philosophical framework of development and knowledge production? Is it the policy of facilitating the creation of a critical mass of development researchers who can shift gear as they produce knowledge to improve the conditions of the poor because of their autonomy to move resources and researchers, especially on the ground? In the case of the MMRPs, which were conceived to be more than a model of research management, but proponents of a philosophy of development and a particular mode of knowledge production, the choice is between developing a research movement or an organization.

Demand-driven, location-specific and multidisciplinary research

The recent incorporation of participatory frameworks into international discourses has tempered the conventional mode of development intervention, in which technically superior and resource-rich external agencies provide inputs for specific projects in the developing world implemented by groups working on behalf of the recipients of development assistance. The participation of the intended beneficiaries in the search for "bottom-up" solutions has now come to be accepted as vital to the dominant development paradigm.

Although donors that support research capacity building programmes may subscribe to this perspective at a high level of abstraction, and espouse a participatory framework in one form or the other, they diverge on substantial theoretical and operational issues because of differences in interests, missions, visions and thrusts. They differ, for instance, in their views of the type of research capacity that is required for participatory development goals. Some agencies focus on building basic and non-participatory natural or social science research capacities that are adapted to the conditions in the developing world, convinced that science can make long-

term contributions to understanding development issues and promoting people empowerment. Other agencies confine themselves to building capacities for scientific research but enhance other capabilities as well (e.g. networking) to ensure the influence of science on policy and action. Still others directly support and encourage participatory action research, pointing to the limits of conventional scientific research in informing development work, and believing that knowledge production processes that involve the beneficiaries will best serve participatory goals. Thus, research capacity building in developing societies, as inferred from the programmes studied, refers to support for a wide range of activities that are expected to make a meaningful contribution to the societies concerned.

The programmes included in this study are all promoting development-oriented and demand-driven research. There are nevertheless interesting similarities and differences among them in terms of how they relate to or incorporate the interests of the potential users of the research, since most of development cooperation frameworks consider the explicit impacts of research on development processes as a criterion for support. The university-based programmes respond to the demand from local universities and society at large for academically qualified researchers and teachers in the social sciences, natural sciences or in multidisciplinary fields (e.g. the environment). The research areas covered by these programmes reflect the themes that permeate the new discourses (poverty alleviation, gender and the environment), as well as the salient problems of the countries concerned (e.g. democratization issues in Bolivia, technical underdevelopment in Nicaragua, rural poverty in Vietnam). Moreover, many of the programmes (e.g. the natural science SIDA/SAREC programmes in Vietnam and Nicaragua, DANIDA-SUDESCA, ENRECA, GTZ-PROIEB, CEPLAG) have developed mechanisms to consult or to link up with the intended research beneficiaries outside academia.

In the university-based academic programmes the institutionalization of links with end users has been generally constrained by the heavy demands of graduate training programmes and the prevalent view of the relationship between knowledge production and utilization among academics. This view assumes that research on specific development issues along disciplinary lines will enlighten policy options as long as it is done according to established norms of scientific practice. Interestingly, some of the programmes studied (e.g. SIDA/SAREC's FSRP), have modified this view by incorporating the needs of the users into the definition of research problems, but they are not as concerned with the issue of utilization. The policy-oriented programmes outside academia (e.g. MAP, VISED, UNDP) share the assumed relationship between research and utilization in conventional academic practice. For them, the knowledge they produce in line with the theoretical frameworks and prescribed methodologies of relevant disciplines ought to be utilized by policymakers because of its scientific validity.

Concerned with improving the conditions in the specific areas that they serve, most programmes outside academia (e.g. the MMRPs, APNBLP, FTPP and PIRN) subscribe, albeit to different degrees, to an unarticulated mode of knowledge production that differs from the traditional academic mode. This mode consists of cognitive and social practices carried out in the context of application to a concrete problem. The practices transcend the theoretical and methodological positions of collaborating research partners from different branches of knowledge and disciplines, are organizationally less hierarchical and tend to be more transient. In the course of understanding a problem, researchers go back and forth between the "fundamental and the applied, the theoretical and the practical ... the curiosity-oriented and mission-oriented research". Being locally driven and constituted, the alternative mode of knowledge production is sensitive to local contexts, and is committed to ensuring user involvement not only in the dissemination of findings but also in defining problems and setting research priorities. It recognizes the existence of multiple knowledge sites and views the scientific practices lodged in universities as one of many sites that are brought together in the search for solutions to particular problems. Finally, quality is assessed not only in terms of technical merit, but also in terms of the usefulness or relevance of the knowledge produced. As a consequence, the emergent research practices are socially more accountable and responsive.

Such an ideal typical depiction of an alternative mode of knowledge production enlightened the design of the MMRPs, although articulated in a slightly different way and in a less codified manner at the time the programmes were established. Of all the MMRPs, however, the KRPLLD is the most aware of an inchoate alternative approach to knowledge production, and is the only one that has begun to codify its experiences in terms of knowledge systems.

Building a demand-oriented, location-specific research capacity requires a multidisciplinary perspective. Of the programmes included in the study, the MMRPs are the most multidisciplinary, although in practice they are still far from achieving the level of multidisciplinarity that is needed. In Vietnam, where research teams are required to involve representatives from different disciplines, the level of interactions and exchanges among them still leaves much to be desired. The Indian country team noted that slightly more than half of the KRPLLD projects involve interactions with social scientists, natural scientists, engineers and government technicians, but that there is a problem in achieving multidisciplinarity. It attributes the problem to the weakness of the social science community and the narrow disciplinary functioning of most universities and research institutes in India, an observation that applies to the other MMRPs as well. Although the problem is surmountable in the long term, the lack of multidisciplinarity in programmes such as the MMRPs is a serious drawback given their implicit agenda of synthesizing a wider range of development and research experiences that could contribute to new and grounded knowledge.

Capacity building: output, quality, evaluation and linkages

The university-based research programmes under Mode I are building research capacity by strengthening the institutional conditions for research, supporting formal training for researchers (Masters and PhDs) and consolidating local postgraduate programmes. Their long-term goal is to focus on the more academic type of research capacity building. Within this framework, the programmes studied have had considerable institutional and individual impacts. As a case in point, SIDA/SAREC has supported about 55 Masters and PhD students in Nicaragua, 25 of whom have graduated in the last 10 years. In the process, the programme has developed faculties and laboratories for engineering, plant sciences and environmental sciences in universities whose missions are to specialize in building development-oriented disciplines in particular branches of knowledge. This report provides detailed evidence of the impressive achievements of most of the other university-based programmes.

Programmes located in government institutions (VISED in Vietnam; MAP in Bangladesh) were set up with very clear goals: to produce personnel qualified to conduct research that will address policy needs. The evidence from this study is that both programmes have had considerable impact, despite their relatively short-term duration. In Bangladesh, for instance, MAP aims to provide policymakers with institutional arrangements and technical capabilities to monitor poverty on a regular basis and to analyze the impacts of macroeconomic and adjustment policies at the micro level. MAP is reported to have accomplished a rare type of capacity in government departments, namely, expertise in monitoring poverty and obtaining systematic data for policymaking on poverty alleviation.

Despite the differences among the programmes that formed their own institutional set-up outside a university, the MMRPs, the APNLBP in India, and the FTPP and PIRN in Bolivia are very similar in terms of the type of capacity they are aiming to build. These programmes hope to substantiate the concept of demand-driven research, to popularize a participatory approach to research, and to institutionalize the process of learning from the masses. All of these programmes reject the concept of knowledge for its own sake. They also emphasize the importance of disseminating information to end users, be they policymakers at the national level as in the case of the MMRPs in Bolivia, Tanzania and Vietnam, or local communities, officials and political leaders, as in the other programmes. Among these programmes, the MMRPs have supported the largest number of researcher-initiated projects on a wide range of topics, the results of some of which have been used as inputs for policy formulation or for crafting viable solutions to concrete problems.

Unlike university-based graduate degree programmes or focused capacity building programmes like MAP, most of the MMRPs deal with inexperienced researchers, whose studies do not usually culminate in measurable outputs like a Masters or a

PhD. Moreover, for many of the programmes, the processes of conducting participatory research are equally, if not more important than the outputs. Given these features, it is difficult to assess capacity building outcomes primarily on the basis of the number of individuals who obtain project funding or go through training. In the absence of systematic qualitative data on individual capacities, it is worth noting the country teams' observations regarding the palpable effects of the MMRPs on individual researchers in view of their low levels of baseline expertise. The Indian country team, for instance, commended the KRPLLD for building the capacity of a new breed of "barefoot researchers" who have begun to develop a research culture through their involvement in the programme. These researchers have incorporated their new learning in "spin-off" institutions like the Centre for Environment and Development, Sreyas (Prosperity) and Maithri (Friendship), which have arisen from projects funded by the KRPLLD.

Like the MMRPs, the APNLBP has enhanced the capacity of individual researchers, research institutions, NGOs and the grassroots sector, i.e. farmers. The principal investigators in the APNLBP research projects included a number of junior researchers. Apart from developing the capacity of young researchers in biotechnology research, the programme has also helped established research institutions and NGOs to diversify their activities to include non-traditional areas like micropropagation through tissue culture, vermiculture composting, production of bio-fertilizers and pesticides, integrated pest management systems, etc. Furthermore, the programme has exposed biotechnology scientists to the new methodology of participatory technology development.

On the other hand, the FTPP in Bolivia aims to develop and disseminate participatory methodologies for local communities in planning sustainable forest management systems, utilizing the traditional knowledge of indigenous peoples. The programme has assisted an unspecified number of university researchers' to conduct action-oriented research, requiring immersion in indigenous communities and understanding grassroots organization. Moreover, the FTPP has provided training for members of indigenous communities to become "barefoot researchers", some of whom have the potential to pursue careers in participatory research and planning. Institutionally, the FTPP has established national and regional networks of focal points for community forestry in its efforts to decentralize action. Finally, PIRN aims to contribute to the local development of indigenous peoples by training them to recover and reintroduce their lost technologies. It supports researchers who are accountable to the indigenous population, which decides on the extent and follow-up of projects, even though project proposals and outputs are subjected to peer review.

The direct impact of university-based graduate training programmes on the concrete development needs of the countries concerned is difficult to pinpoint, apart from

their obvious contribution to the development of higher education institutions. Nevertheless, the local researchers interviewed in Bolivia, Nicaragua and Tanzania stressed that their programmes' research agendas and the topics selected for study are relevant to local needs. The Vietnam country team also highlighted the wider application of a number of techniques developed with SIDA/SAREC support. On the question of whether the programmes outside a university address development needs in greater measure than those in the university, the Vietnam country team argued convincingly that the need for various skills in developing societies is so great that all the programmes have special niches. Having experienced training under other academic capacity building programmes, like the SIDA/SAREC-funded FSRP, the members of the Vietnam country team claim that they have become more appreciative of the MMRP-type of participatory and development-oriented research. But while academic training can give researchers confidence and potentially can open their minds to participatory research, it is not a prerequisite for the development of participatory research capacities, as the KRPLLD experience shows. Nevertheless, it is imperative for the barefoot researchers to learn how to conceptualize and contextualize research problems even as they broaden their skills.

Notwithstanding their achievements and the visibility they have attained within a short time, the MMRPs have criticized themselves for the uneven quality of their research outputs. This problem does not bother the university-based graduate research programmes as much because academic standards and systems of quality assurance are in place. The issue of quality is also less problematic for the policy-oriented research programmes of MAP, VISED and the UNDP. International academic standards for the quantitative social science disciplines constitute the yardstick of these programmes. Moreover, since the stature and competence of researchers are believed to be important in ensuring that policymakers heed the implications of their policy studies, most of the researchers in the three programmes are well established and knowledgeable in the analytical tools of the relevant disciplines. The issue of quality is important but not as salient to the programmes closest in orientation to the MMRPs – APNLBP, PIRN and FTPP. The utility of the studies conducted under these programmes to concrete action is the gauge of their value. In the case of the APNLBP, technical quality is assured by the academically rooted but evolving standards in the field of biotechnology.

Quality assurance, however, seems to be more prominent for the MMRPs because of one distinguishable feature. With the exception of REPOA, which simultaneously undertakes substantive research and manages studies initiated by individuals and institutions outside the programme, the MMRPs serve as research facilitators rather than convenors of multidisciplinary teams of expert researchers. The research facilitated by the programmes through a competitive selection process ranges from academic studies to action research, albeit within the framework of participatory development. From one viewpoint, the wide range augurs well for the MMRPs. The

Indian Country Report, which likens the MMRP to the biblical sower of many seeds, admiringly remarked on the diversity of the issues selected by the researchers in Kerala, which the usual top-down research agenda approach could never have hoped to capture.

But precisely because they cast wider nets in societies with uneven research capacities, the MMRPs are more vulnerable to problems of research quality. To improve technical quality, the MMRPs have devised closer monitoring and mentoring schemes. These schemes include networks of senior researchers in agricultural institutes and the creation of two positions for senior research scientists in Vietnam; study circles of researchers in India and Bangladesh; academic advisers for projects in Bolivia; and tutorships for junior researchers by senior researchers in Nicaragua.

A major challenge facing the MMRPs and similar programmes that are aiming to build capacity for demand-driven research, and ultimately to produce useful knowledge that transcends disciplinary boundaries, is how to measure in qualitative and quantitative terms the output of process-oriented research with multiple outcomes. For programmes that are not premised on the traditional mode of knowledge production, technical quality is only one dimension of quality. Social relevance is another. Existing standards of science and scholarship are used to assess technical quality. But apprehending the nature of a specific development process that is largely invisible requires more than the usual research techniques. In addition to the traditional skills that the research community has absorbed, a nuanced reading of development that is iterative and gradual also entails "listening skills, the ability to combine an open and non-judgmental approach with enough understanding to make sense of and draw insight out of what one is observing", and a capacity to reflect upon and intuit underlying movements. Clearly, the conventional indicators of quality in academic research, such as peer review, publications and citations in professional journals are not very relevant to a demand-driven, participatory research.

Developing meaningful indicators would require sifting through conventional measures, unpacking the dimensions of development research, and identifying possible qualitative indicators and measures of processes that do not lend themselves easily to formalization. Some potential indicators include the following:

- changes in attitudes to research (on the part of the general population as well as policymakers);
- the sensitivity and receptivity of researchers to local knowledge;
- the awareness of the importance of self-governance and the exercise of autonomy to decide on a research agenda that meets local interests;
- the popularization of the participatory approach to research and the process of learning from the masses;

- the commitment to the production of research results of quality and of relevance;
- the capacity to negotiate, design, implement and manage research programmes; and
- the determination to be accountable both to the local community and to the donor.

Regarding linkages, the links among the programmes within universities (CEPLAG, SIDA/SAREC in Tanzania, ENRECA) or among the universities covered by a particular programme in different countries (SIDA-SAREC in Nicaragua, Bolivia and Vietnam) are well established. In Latin America, the inter-university and inter-institution networks of SUDESCA/DANIDA and PROIEB cut across countries. Moreover, innovative ways of linking Southern countries with donor assistance have been developed. For example, the new phase of the SIDA/SAREC programme in Bolivia will support the training of researchers in the social sciences. However, instead of going to a university in Sweden for disciplinary training (sandwich Masters and PhD courses), they will be able to pursue graduate degrees in reputable Latin American universities.

On the other hand, for programmes lodged outside the halls of academia, links with university-based researchers have taken different forms: academics have been directly involved in research projects as researchers (the MMRPs, MAP), consultants or trainers (the MMRPs, FTPP, PIRN). As for international networks, linkages with researchers in other parts of the world are evident in the programmes. Some researchers funded by university-based programmes have been able to present papers at conferences and to establish informal links with other researchers working in the same field. Some of the programmes also maintain linkages with research networks. For instance, the EPRC in Uganda has had extensive connections with the African Economic Research Consortium (AERC). A number of programmes (MAP in Bangladesh, the APNLBP in India, and the MMRPs) are part of umbrella programmes with related or similar projects in other countries. In the case of the MMRPs, funds have been set aside and used for joint workshops and exchanges among representatives and researchers of the programmes in other countries. It is notable, however, that while the MMRPs have the funding flexibility to allow them to interact and to exchange researchers, initiatives in this direction have not been as significant as one would expect.

On the general application of the MMRP mode of research collaboration
The mode of North–South cooperation operationalized in the MMRPs is most appropriate for research involving regional or local needs that are as close as possible to the ground, although it is important to stress the need for links to critical national and regional policymaking bodies. This mode of cooperation does not seem to be suitable for academic discipline-based capacity building programmes in the natural sciences such as those funded by SIDA/SAREC or DANIDA. The MMRP mode may be an appropriate model for university-based, problem-oriented capacity

building programmes in the social sciences, and in multidisciplinary applied scientific fields such as plant breeding, biotechnology and environmental studies.

The researchers are cautious in generalizing the MMRP mode of North–South cooperation, with autonomy as its leitmotif, and applying it to other forms of research cooperation. For one, potential partners in the developing world represent conflicting or contradictory ideological priorities and power positions. To circumvent the dilemmas that might arise from linking up with groups that hold divergent views of development, the choice of partners who will work closely with groups whose interests ought be served (e.g. the poor) is critical. In bilateral cooperation involving governments, however, it would be a breach of protocol and an exercise of asymmetry for a donor to specify and insist on its chosen partner from among government agencies or local institutions.

Concluding notes

Having engaged in enlightening discussions with representatives of the donor agencies and the programmes, the country teams can only wish for more sharing among the resource persons interviewed for this study. It is in this light that this report concludes with a recommendation to create a forum for international scientific cooperation programmes in the countries involved. Such a forum would not only reveal to the funding agencies and local programme managers their similarities and differences. It may also lead to an agenda-setting process whereby the research needs of the country are assessed by the relevant communities in the concrete contexts of geography, politics, economics and culture. It is hoped that the establishment of such a forum will enhance convergence on very basic assumptions and approaches to development and capacity building in the South and respect for divergent positions.

The proposed forum is only one of many possible strategies for bringing together donors and the research communities to reflect upon and discuss the modalities of capacity building they have chosen to support or participate in, in the light of their evolving philosophies of development and knowledge production. In this process they may reflect on the effectiveness and appropriateness of the modalities they are operationalizing within the prevailing political economic and social contexts. In assessing the corresponding achievements in harnessing science and technology for development, donors and recipients may reaffirm or revise the research modalities they have painstakingly developed over the years. In so doing, they may cover significantly more distance than they already have in pushing the current limits of capacity building for development-oriented and empowering research in the South.

1 Introduction

1.1 Background and Organization of the Report

In November 1997 the government of the Netherlands convened a workshop in Leusden, and invited 12 scholars from developing countries to discuss the feasibility and usefulness of a comparative study of different approaches to North–South research collaboration.[1] From this study, the Research and Developing Countries Division[2] of the Directorate-General for Development Cooperation (DGIS) hoped to obtain feedback on the implementation of its policy regarding North–South collaboration in the area of science and technology. Initiated in 1992 by the then Minister of Development Cooperation Jan Pronk, the policy was formulated in response to the criticism that Dutch development research cooperation was insufficiently oriented to the needs of the South.[3] The policy aimed to address the prevailing asymmetry in North–South research collaboration,[4] as a result of which international cooperation projects tend to be framed along the academic interests and paradigms of Northern researchers, rather than in response to concrete development issues confronting the South.

Addressing the question of irrelevance, the main goal of the policy thus was to link research more closely to the needs and interests of the developing world, particularly of the poor. To minimize the possibility of Northern researchers dominating collaboration efforts with Southern partners, the policy entailed support for long-term, broad-based, location-specific multidisciplinary research programmes. Furthermore, it called for a shift in key responsibilities – for agenda and priority setting, the conduct of research and financial accounting – from the North to the South. This policy, which departed radically from traditional practice and generated strong reservations within the Dutch research community, resulted in the creation of Multi-annual, Multidisciplinary Research Programmes (MMRPs) in Africa (Uganda and Tanzania), Asia (Bangladesh, India and Vietnam) and Latin America (Bolivia and Nicaragua).[5] At the time of the Leusden workshop these seven MMRPs were in operation, and plans for the establishment of three more in Egypt, Mali and Zambia were on the drawing board.

For two productive days in Leusden, the scholars learned about the MMRPs, discussed their main features, and compared them to other donor-supported initiatives with which they were more familiar. After a series of group and plenary discussions, the participants concluded that a comparative study would be meaningful and agreed on the main questions that ought to be addressed. At the end, three participants were asked to take up those questions, as well as the suggested methodology, and develop them to a complete research proposal.

Thus, in February 1998, Cynthia Banzon Bautista (Professor, University of the Philippines, Philippines), David Kaplan (Professor, University of Cape Town, South Africa), and Léa Velho (Professor, University of Campinas, Brazil) met at the

Ministry of Foreign Affairs in The Hague and submitted a research proposal to DGIS. The research began in June 1999 and ended in May 2000.[6] The study looked at like-minded programmes, but for purposes of comparison with the MMRPs, the choice of countries was determined by the presence of the MMRPs. This document constitutes the final report of that research. It presents a synthesis of the findings of seven country teams (Bangladesh, Bolivia, India, Nicaragua, Tanzania, Uganda and Vietnam), as well as the insights of the above-mentioned authors who also acted as coordinators for their respective continents.[7]

This report is divided into four chapters. The introduction describes the context of North–South research cooperation and the conceptual framework that provided the starting point of the study, as well as its objectives, methodology and limitations. Chapter 2 gives a comparative overview of the social, political, economic and research situations in the seven countries and presents the selected programmes in broad strokes.

The substance of the research is contained in Chapter 3, which distinguishes the modalities of North–South research collaboration along several dimensions:

- the institutional arrangements and administrative mechanisms;
- the types of research capacities the programmes aim to develop, and the underlying assumptions regarding development processes and knowledge production;
- outputs and achievements; and
- research linkages.

Drawing from the main points in Chapter 3 and the highlights of the country studies, the report concludes with preliminary answers to the questions framed at the Leusden workshop (see Section 1.3 for the questions addressed by the study).

1.2 The Development Context of North–South Research and the Conceptual Framework of the Study

Since the end of World War II, international research cooperation has reflected the changes in the direction and substance of North–South relations. Up to about 1970, the rivalry between the United States and the Soviet Union for ideological supremacy led to their stimulation of indigenous development in the countries within their respective spheres of influence.[8] For countries under the sway of Western liberal capitalism, modernization theory, which advanced the thesis of unilinear development leading to industrialization, provided the justification for funding assistance and Northern intervention in the South. For the developing countries within the Soviet sphere, on the other hand, the need to develop socialist models of industrialization legitimized Soviet support.

At the time, the post-colonial Southern countries that had gained their independence between 1945 and the 1960s suffered from the lack of a critical mass of intellectuals or academics with the training to analyse development needs from their own perspectives. In the belief that the absence of this group was hampering the internal development of these societies, in the 1950s and 1960s donor-initiated efforts focused on building the capacity for research in the South. Thus training fellowships were offered to students in the natural sciences, social sciences and the humanities so that they could pursue research or graduate degrees in Northern or socialist universities.[9]

Between 1970 and 1985, the first batches of scholars returned to build an academic core in their respective societies, influenced by the dominant paradigms in the countries where they were trained. This particular historical juncture, starting from the late 1960s, coincided with the United Nations initiative to go beyond modernization theories and to explore structural approaches to underdevelopment. The intense debates in international and national development circles, spurred by the increasing awareness of disparities in development trajectories and in the interests of Northern and Southern countries, saw the delineation of an interdisciplinary field of development studies or Third World studies.[10] Influential perspectives from this inchoate field enlightened the pursuit by particular Southern countries of internal development paths that deviated from those espoused by the North.

Although the ideas that animated the development debates between 1970 and 1985 focused largely on structural issues at the international level, the persistence of poverty and continued underdevelopment in the South, despite numerous donor interventions, led to a questioning of top-down or trickle-down approaches that ignored conditions on the ground. By the 1980s, academically oriented scientific research in the developing world was also being criticized for its irrelevance to pressing societal problems. With pressures to address critical issues from the perspective of development constituencies in the South, this period saw the emergence of perspectives and research practices that espoused participatory development as well as field-based participatory research methods.

Developed outside the sphere of influence of the Soviet Union, the alternative perspectives of the 1970s and 1980s filtered into traditional academic social science discussions. Thus, the Southern scholars who had pursued graduate degrees in Northern educational institutions in the 1970s and 1980s were exposed to the development debates and participatory models to which Southern intellectuals and academics made significant contributions. Some of these scholars would later adopt and refine the relatively new approaches in their own analyses and research practices.

The assertiveness of Southern intellectuals in the debates on development theory in the period between 1970 and 1985 was matched by the increasing visibility of the

South in international politics. The period provided more chances for them to take the initiative in their own development, as well as in North–South relations. Unfortunately, as Shinn *et al*. argue, this opportunity has been overtaken by events since 1985. The end of the Cold War led to a reduction of donor commitment to the South, although this has made little difference to Northern dominance. On the contrary, the North has achieved an even greater advantage over the South. The silencing of socialism and "Third Worldism" with the end of the Cold War, the rapid pace of technological developments, the globalization of markets and the structural adjustment programmes that bailed many developing countries out of economic crises, catapulted a neo-liberal ideology emanating from the North into a dominant discourse in the 1990s and 2000.[11]

Interestingly, however, events since the mid-1980s and neo-liberalism itself have serendipitously opened up alternative windows of opportunity for the South to shape its development directions, within the limits of its links to the global economy. These include the democratization of a number of Southern countries, the increasing significance of environmental issues requiring location-specific interventions, the neo-liberal advocacy for linking free markets to democracy and good governance, and the rise of civil society groups. Such trends have provided the impetus for various stakeholders in the South to define their own development agenda, analyse concrete issues and address them in a manner appropriate to their circumstances. Thus, at the interface of development encounters, counter-discourses such as participatory grassroots development have found representation in neo-liberal development thinking, although highlighting equity issues in the predominantly economic discourse of globalization remains a contentious ideological struggle.[12]

Crucial to the identification and solution of development problems by people in the South is their capacity to analyse their situation and organize it accordingly. The training of Southern academics, government personnel and scientists, funded by donor-initiated programmes in previous decades, had contributed significantly to capacity building. But the management of research, technological capabilities and organizational resources to adjust to shifts in the global economy are still assessed to be sorely lacking in the developing world. This gap has been used to justify the gradual reorientation of official development programmes (e.g. CIDA, OECD-DAC, USAID) from "input-oriented approaches" emphasizing technical performance targets, to programming oriented to "capacities to be developed'.

The thrust toward capacity development among donor agencies in the 1990s resulted from a confluence of the low state of capacity in the South, pressures in the North to reduce official development assistance, and overall donor fatigue. The last two factors have made it even more imperative to develop the existing capacities of countries for institutional reform to manage, implement, evaluate and sustain their own long-term development. Budgetary constraints have also led to new approaches to

capacity building that rely more and more on local resources and less on expatriate expertise.[13] Thus, capacity building and strengthening of local organizations have increasingly become the primary objectives of a number of aid programmes.

Apart from low capacity in the South, the mainstreaming of capacity building and local organizational development as ends rather than means has been justified in a number of ways. Drawing from the literature, Petit cites three reasons for this thrust.[14] First is the evidence that when people set their own priorities and design appropriate solutions to their problems, they tend to have a greater sense of ownership and are more supportive of the development process. Second, instilling problem-solving and innovative capacities, including skills for networking and mobilizing resources, will enhance responsiveness to new problems and hence sustainability. Finally, local organizations with enhanced capabilities are vital to democracy, as they hold the market and the state accountable to collective social forces.

Judging from the buzzwords used in official documents and projections in websites, during the 1990s the donor community was supporting capacity-building programmes geared towards enhancing competitiveness, poverty alleviation, sustainable development, gender equality, local development and good governance (participatory development). With the exception of poverty alleviation, which came into vogue in the early 1970s, the other themes were articulated from the mid-1980s onwards. Interestingly, slow gains in poverty eradication in the last 50 years have put poverty alleviation back on centre stage in 2000. The United Nations, for instance, has recently embarked on an assessment of and planning for the contributions of its various agencies to poverty alleviation in the countries where the UN is present. This would suggest that proposed development activities, including research, submitted to UN agencies in the coming years, will be assessed in terms of their inputs to poverty alleviation.

Against the backdrop of the changing direction and content of North–South relations and discourses in the last 50 years, donor-initiated research capacity building in the South has shifted significantly. Whereas between 1950 and 1970 the emphasis was on granting scholarships and extending technical assistance, in the 1980s and 1990s donors favoured collaborative research projects where Northern and Southern partners participate on equal terms. This shift coincided with the realization among some donors that the assumption of technology transfer from North to South is too simplistic. In a joint brochure describing their achievements in development research, SAREC and IDRC claimed that while the ideology and practice of technology transfer assume that all technologies emanate from the North, they are to some extent dependent on the cultures and environments that create them. In reality, a great deal of innovation takes place in the developing world.[15] Notwithstanding the significant change in donor perspective, the modes of carrying out donor-initiated

research policies and their implementation remain problematic despite well-intentioned capacity strengthening programmes aimed at building academic partnerships between Northern and Southern researchers.[16] At first glance, they have tended to reproduce the unequal positions of the partners in the economic and political world order. With their resources and scientific knowledge, Northern partners have been prone to believing themselves more capable of identifying the needs of those in the South and to "teach" them how to do research. In the absence of favourable conditions for the sustained growth of research in the South, on the other hand, Southern researchers have tended to accept without criticism whatever offer of cooperation is presented to them.

In such a context, Northern researchers have continued to dominate research networks despite the rhetoric of collaboration. Experience and the literature provide ample evidence that research themes are decided by Northern partners, to whom most of the benefits of the partnership accrue.[17] Depending on the modality of the collaborative research and the attitudes of the researchers involved, there have been cases of projects where Southern partners served as "glamorized" research assistants who provided the "raw data" for analysis by academic researchers in the North. Even worse, research cooperation programmes devised in the North have frequently been accused of contributing to the consolidation of research traditions, capabilities and reward systems that are divorced from the needs of the South. In effect, research cooperation has helped build a "peripheral" scientific community with no ties to its socio-economic reality.

It would be unfair to argue that Northern partners wilfully dominate North–South research cooperation. Although many of them have determined the directions of research projects in the South, some may have been forced to do so because of the lack of research experience of their Southern partners. The severe constraints on academic collaboration imposed by unequal capabilities have made it imperative to redress the imbalance by developing a critical mass of competent Southern researchers.[18]

DGIS has attempted to reverse the asymmetry between Northern and Southern researchers by instituting a different modality for building or enhancing research capacity. Specifically, the MMRPs established by DGIS in the early 1990s should be situated in the context of the continuing dominance by Northern researchers of collaborative research networks in the South.

The new DGIS policy of North–South research cooperation, as reflected in the MMRPs, is characterized by the following objectives:

- to provide a long-term commitment to support research that addresses the long-term processes of change from the point of view of sustainable development and to advocate policy formulation or reform in the South;
- to emphasize research priorities that are strongly imbedded in Southern social, economic and cultural contexts, and are set and formulated in a social process that involves various stakeholders;
- to stress the collaboration of researchers from various disciplines towards understanding a problem defined in a specific and local context; and
- to restrict the role of the donor to that of facilitator, leaving autonomous bodies in the South to set and implement their own research agendas.[19]

The unifying links among the MMRPs are their focus on sustainable development, demand orientation or insistence on the involvement of users, location specificity, multidisciplinarity, and the strengthening of the capacity of Southern researchers to pursue development- and process-oriented research.

The internal joint reviews of the MMRPs revealed variations in their research thrusts, quality, and levels of effectiveness. Nevertheless, by the time of the Leusden workshop in 1977, most of the seven MMRPs had succeeded in establishing their own identity, enhancing the participation of stakeholders and maintaining their autonomy from DGIS. It has even been suggested that the long process of setting up the MMRPs in many of the countries could itself be seen as a contribution to national capacity building.[20] Convinced of the value of the MMRPs and their contribution to redressing the asymmetry in North–South research collaboration, the organizers of the Leusden workshop proposed that a study be conducted to compare the impacts of research capacity building programmes initiated by DGIS and other donors. The study would determine whether the MMRPs had indeed been path breaking, and whether they do make a practical difference in the perception of the South.

This comparative study of the impact of donor-initiated programmes on the research capacity of the South was undertaken in the seven countries in which the MMRPs are located. The next section presents the specific objectives and research questions of the study.

1.3 Objectives and Research Questions

Since it has been argued that other donors follow approaches with characteristics similar to those of DGIS, as operationalized in the MMRPs, the general objective of this study was to conduct a comparative analysis of the new forms of support of these like-minded donors.[21]

From the outset, the country researchers hoped to gain insight into each of the programmes, to understand their genesis and the changes they have undergone in the

appropriate contexts of time, geography, political economies and cultures, including the prevailing research and academic cultures. The researchers were aware that their task was not to evaluate the programmes or to render judgements regarding the superiority of one mode of research collaboration over another, but to compare the main characteristics of each programme and how they are expressed at the level of implementation.

Within this rather broad objective the study attempted to answer the following questions:

- Are the asymmetries reflected in the "conventional" programmes of research cooperation also present in the cases under study?

- From the perspective of the recipient countries, is the Netherlands policy for development cooperation, as contained in the MMRPs, any different from the "conventional" forms of North-South cooperation, or from the policies recently adopted by similar agencies? What are the differences and similarities between these policies, specifically in terms of the characteristics or attributes of the programmes: their autonomy in decision making (control over policy, management and budget), their duration, and their focus on multidisciplinary, demand-driven, location-specific research and participatory practices?

- Are the programmes implemented by the different donors producing the desired results? Here, the focus is on the various types of **research capacity building** (institutional and individual; conducting and managing research; research appreciation and use); the production of results of **quality and relevance** for achieving development objectives; and the establishment of scientific relationships with other countries (**international research collaboration**), etc.

- Is the Netherlands policy applicable only to some types of research, particularly those involving specific regional needs, or could it be adopted in a more general way in other forms of North–South research cooperation?

1.4 Research Process and Methodology

Following the approval of the research proposal submitted to DGIS in February 1998, the regional coordinators, accompanied by their respective project assistants, met in The Hague in May 1999 to refine the research questions and the methodology. They also agreed on a series of research steps that would be followed by the three regional teams. The organization of the country teams varied across the three regions. For Africa and Asia, the coordinators subcontracted the field research to institutions and researchers in the countries concerned, whereas the Latin American

coordinator was directly involved in the field research and recruited researchers from Latin American countries other than those included in the study.

Research in the three continents commenced with the conduct of regional conceptualization workshops, immediately followed by the field research, which lasted for about six months. This field research was longer and more complex than originally planned because the researchers had to undertake a "mapping-exercise".[22] In the course of this exercise, other donor-funded research programmes that shared some characteristics with the MMRPs were identified.

1.4.1 Programme selection

The Country Reports describe the process of selecting the programmes that would eventually be compared with the MMRPs. Even as they were conceptualizing the project, the regional coordinators were aware of the difficulty of finding donor-initiated research capacity building programmes comparable to the MMRPs. Indeed, the mapping exercise revealed a range of programmes that are similar to the MMRPs in only one or two respects but not in other dimensions. Moreover, the contexts of the countries involved and in some instances, the specific thrusts of the MMRPs in those countries, determined the attributes emphasized and, consequently, the selection criteria used by the country teams (see Section 3.1). In the end, the only common thread among the programmes selected is their concern with research capacity building in developing societies. Most of them entail a long-term commitment on the part of the donor agency. They enjoy varying degrees of autonomy, ranging from minimal with regard to decisions on what research questions will be addressed and how the research will be conducted, to full autonomy with respect to the use and allocation of funds.[23] The programmes aim to enhance capacity either for policy studies or applied field-based research oriented toward specific development issues. They vary in research orientation along two scales: one a continuum ranging from academic/fundamental to applied/action research, and the other a continuum representing a macro-policy orientation to a focus on purely local issues, among other differences. Nevertheless, all the selected programmes support and advocate the need for concrete research applications that will benefit specific end users, although the intended users vary from one programme to another. The Country Reports describe the process followed by each team in selecting the programmes.

The programmes also differ in terms of their institutional arrangements and relations with Northern researchers and donor agencies. Despite the differences, however, they share common features with the MMRPs and, by chance, with similar programmes in the other countries, thus allowing some cross-country and cross-programme comparisons.

The programmes included in this study are as follows:

AFRICA		
Tanzania	**REPOA**	Research for Poverty Alleviation, the local MMRP
	ENRECA	Enhancing Research Capacity
	WRDP	Women's Research and Documentation Project
	IDS/WSG	Institute of Development Studies, Women's Study Group
Uganda	**NURRU**	Network of Ugandan Researchers and Research Users, the local MMRP
	EPRC	Economic Policy Research Centre
	MISR	Makerere Institute of Social Research
ASIA		
Bangladesh	**PRPA**	Programme for Research on Poverty Alleviation, the local MMRP
	RED-BRAC	Research and Evaluation Division of the Bangladesh Rural Advancement Committee
	MAP	Monitoring Adjustment of Poverty
India	**KRPLLD**	Kerala Research Programme on Local Level Development, the local MMRP
	APNLBP	Andhra Pradesh–Netherlands Biotechnology Programme
	UNDP	Strategies and Financing for Human Development
Vietnam	**VNRP**	Vietnam–Netherlands Research Programme, the local MMRP
	SIDA/SAREC FSRP	Farming Systems Research Programme
	VISED	Vietnam Sustainable Economic Development
LATIN AMERICA		
Bolivia	**PIEB**	Programa de Investigación Estratégica en Bolivia, the local MMRP
	FTPP	Forest, Trees and People Programme
	PIRN	Proyecto de Investigaciones en Recursos Naturales
	SIDA/SAREC	Programmes in two universities and two research centres
	PROEIB	Programa de Educación Intercultural de Bolivia
	CEPLAG	Centro de Planificación y Gestión
Nicaragua	**ADESO**	Asociación para el Desarollo Sostenible de las Segóvias, the local MMRP
	IDRC	International Development Research Centre of Canada support to four NGOs
	SIDA/SAREC	Programmes in four local universities
	SUDESCA	a programme funded by DANIDA, the Danish cooperation agency
	NITLAPÁN	a local research institute

The duration of the programmes, their institutional location and funding sources are enumerated in Table 1 (see Chapter 2 for brief descriptions, and the Country Reports for more detailed discussions of each of the programmes).

It is important to note that four of the programmes listed above were eventually dropped from the study: EPRC (Uganda), MISR (Uganda), NITLAPÁN (Nicaragua) and RED-BRAC (Bangladesh). Although lessons from them have been incorporated into this report, the programmes do not figure directly in the discussion starting in Section 3.3. As discussed in Section 3.1, these are research units with multiple donors rather than programmes, and involve a distinct set of research and capacity building activities that would not exist without donor support. Although they yielded interesting insights regarding the sustainability of research capacity building programmes, the difficulty of exploring the features and disaggregating the impacts of specific donor-supported and other programmes led to the decision to exclude them from the comparative analysis. This decision was weighed against the absence of comparator programmes for the MMRP in Uganda and the reduction in the number of comparators in Bangladesh. In the end, however, the benefits of the decision outweighed the costs, since the Country Reports compare these and the selected programmes in the countries concerned (Bangladesh, Nicaragua and Uganda).

1.4.2 Data sources and validation of findings

The country teams relied on multiple data sources. For the mapping phase of the project, the teams interviewed representatives of donor and development agencies to identify programmes that could be compared with the local MMRP. The Vietnam researchers were the exception. Because of their networks, they were able to comb through the detailed documents of existing programmes in the Ministry of Science, Technology and Environment (MOSTE), the agency in charge of international research cooperation.

For the actual study, the research teams examined documents and interviewed managers, members of advisory boards, researchers (both young and experienced; those who had and had not succeeded in obtaining support), policymakers, research users, people engaged and knowledgeable in other areas of research, and the donor community. Other resource persons were requested to complete questionnaires. The teams attended meetings and observed the activities of the different programmes (e.g. agenda-setting workshops), examined research proposals submitted, and made site visits (see the Country Reports for detailed accounts of the methodology).

Once the empirical data had been compiled, the first draft of the Country Report was sent to the interviewees and other interested parties in the country concerned. Validation workshops were held in early 2000 in Estelí (Nicaragua), La Paz and Cochabamba (Bolivia), Dar es Salaam (Tanzania), Makerere (Uganda), Dhaka (Bangladesh) and Hanoi (Vietnam), at which the teams presented and discussed the

reports and the research findings with local stakeholders. The workshops were attended by a significant number of individuals who, in the course of fruitful discussions, offered valuable insights to improve the descriptions of the programmes and the comparative analysis. Although the Indian Country Report was not formally discussed at a validation workshop, it was reviewed by the staff of the programmes selected.

Based on the discussions in the validation workshops, changes and amendments to the reports were made, and revised versions were produced and presented at a general workshop in Cape Town, South Africa, in May 2000.

It is important to note that this report contains more information on the MMRPs than the other programmes. This is not because the teams collected more data on the MMRPs than on the other programmes. In almost all the countries covered by the research, the teams started with very little knowledge of the selected programmes, including the MMRPs, and gained an understanding of them only in the process of data gathering. The emphasis on the MMRPs is due instead to the use of these programmes as the starting points for the study. Moreover, by casting the comparative findings in terms of the underlying development discourses and modes of knowledge production, which are more explicit in the MMRPs, the discussion of the MMRPs inevitably took up more space. The relative imbalance in the amount of information presented here in no way reflects on the contributions and efficacy of the non-MMRP programmes within their frameworks and objectives.

2 Contexts of the programmes investigated

2.1 AFRICA

2.1.1 Political economic contexts and development discourses

Tanzania and Uganda are post-colonial societies in sub-Saharan Africa, which obtained their independence in 1961 and 1962, respectively.[24] In the years immediately before and after independence, both countries experienced considerable economic progress. From 1961 to 1967, Tanzania enjoyed a high rate of economic growth, averaging 6% per annum.[25] Similarly, Uganda's economy grew rapidly at a rate of approximately 6.7% per year in the first five years following independence, and remarkable improvements were made in the social sector. Unfortunately, for both countries, these trends were reversed within a decade.

With the Arusha Declaration in 1967, the Tanzanian government adopted a policy of socialism, self-reliance and rural development. The policy, enshrined in the amended 1975 Constitution,[26] affirmed party control of all sectors of the economy, translated into public and cooperative ownership of the means of production. As a consequence of the policy, the number of public enterprises rose from just 43 in 1966 to 380 in 1979 to 450 by the mid-1980s.[27] Economic growth also slowed down, from 4% per annum in the period 1967–73, to 2.3% from 1973 to 1978; to a low of 1.5% from 1979 to 1985.[28] Although the country made notable achievements in the provision of social services,[29] the economy nearly collapsed in the 1980s under the weight of an over-expanded public sector, over-centralized government, and a system of "protected capitalism" for those in power.[30]

In response to the economic crisis, in 1981 Tanzania launched a structural adjustment programme to restructure its economy away from public sector control towards one driven by the market. Between 1972 and 1985, the government attempted to combine economic adjustment with a socialist thrust as a transition towards market orientation.[31] By 1986, the IMF and the World Bank had become involved in the country's economic recovery programme. Their involvement transpired a year after Tanzania's first and socialist president, Julius Nyerere, resigned from his post to oppose the country's return to a market economy.

Like Tanzania, Uganda's impressive economic growth between 1963 and 1973, its balance of payments surplus and low inflation were short-lived. Civil war and political instability in the early 1970s, aggravated by General Idi Amin's coup and imposition of military rule, aborted the country's promising post-independence economic record. Uganda's GDP growth rates declined rapidly during the Amin "decade", at an average rate of 1.6% for the period from 1972 to 1978. This implied a 4.4% rate of decline of GDP per capita, given a population growth rate of 2.8%.[32] The expansion of the public sector in economic activity and the expulsion of members of the Asian community aggravated the economic woes of Uganda.

Table 1. The programmes included in the study and their respective donors, by region and country.

AFRICA			
Programme	**Institutional status/location**	**Donor(s)**	**Year established/ duration**
TANZANIA			
REPOA	Independent	DGIS (the Netherlands)	1995 – long term
IDS/WSG	Study group functioning at the IDS/UDSM	SIDA/SAREC	1982 – long term
WRDP	NGO housed at the University of Dar es Salaam	SIDA/SAREC	1982 – long term
ENRECA	Three institutes at the University of Dar es Salaam	DANIDA	1994 – long term. Phase I completed, phase II under negotiation
UGANDA			
NURRU	Independent - NGO with 25 member organizations	DGIS (the Netherlands)	1994 – Long term (10 years)
EPRC	Autonomous research institution	African Capacity Building Foundation, Ugandan government and other donors: EU, UNDP, World Bank – combination of institutional and project based support	1994 – long term from ACBF and Ugandan government; short term from other donors
MISR	Created in 1948; obtained semi-autonomous status 1994, part of Makerere University	Various: DANIDA, IDRC, UNDP, USAID, World Bank, Ford Foundation	Long and short term

ASIA			
Programme	**Institutional status/location**	**Donor(s)**	**Year established/ duration**
BANGLADESH			
PRPA	Agreement between the government of the Netherlands and the Grameen Trust	DGIS (the Netherlands)	1994 - Long term (5 years each for phases I & II)
RED-BRAC	A research division of an NGO which is a private development organization	RED receives funding from BRAC	1975 - Long term and short term, depending on the agency
MAP	Independent - located at CIRDAP (regional body)	IDRC-CIDA	1990 – Long term
INDIA			
KRPLLD	Independent – lodged at CDS	DGIS (the Netherlands)	1995 - Long term (4 years each for phases I & II)
APNLBP	Independent – lodged at the IPE – implemented in 10 villages in Andhra Pradesh	Netherlands bilateral cooperation	1996 (4 years) - Long term, with arrangements similar to the MMRPs
UNDP	Independent – lodged at CDS	UNDP, IDRC	1995 to 1997 – Short term
VIETNAM			
VNRP	Independent – operates within NISTPASS in Hanoi with a second office at the Economics University, Ho Chi Minh City	DGIS (the Netherlands)	1994 - Long term (new agreement up to 2002)
SAREC	3 universities (Agriculture and Forestry, Ho Chi Minh, Can Tho), one research institute (National Institute of Animal Husbandry, Hanoi)	SIDA/SAREC (Sweden)	1990 - Long term – new phase began in 2000
VISED	Located at the Ministry of Science, Technology and Environment (MOSTE)	IDRC/CIDA (Canada)	From 1993, ended in 1996 medium term; evolved intoVietnam Economic and Environmental Management with other donors (e.g. the Ford Foundation.)

LATIN AMERICA			
Programme	**Institutional status/location**	**Donor(s)**	**Year established/ duration**
BOLIVIA			
PIEB	Independent 2000: Fundación PIEB, La Paz	DGIS (the Netherlands)	1995 – Long term (5 years each for phases I & II)
FTPP/FAO	Linked to CERES, an independent research centre in Cochabamba	Netherlands Cooperation through FAO	1992 – Long term – new phase under negotiation
PIRN/DFID/ CIDOB	Linked to CIDOB in Santa Cruz de la Sierra	DFID (UK)	1997 – Long term - 3.5 years phase I – Phase II under negotiation
SAREC	Institutional support to CEBEM in La Paz and CERESin Cochabamba (new phase: universities)	SIDA/SAREC (Sweden)	1985 (CERES), 1989 (CEBEM) Long term, 2000 phase II: 6 years (renewable)
PROEIB	Training offered at the Universidad Mayor de San Simón, Cochabamba	GTZ (German Cooperation Agency)	1997 - Long term – phase I to finish in 2000 – new phase for 3 more years already approved
CEPLAG	Agreement: Flemish Inter-University Council and UMSS in Cochabamba	Belgian–Flemish Cooperation Agency	1998 - Long term: 7 years (10 years)
NICARAGUA			
ADESO	Independent – association of 32 member organizations,Estelí	DGIS (the Netherlands)	1995 - Long term (5 years each for phases I & II)
NITLAPÁN	Administrative autonomy – operates within the Universidad Centro-americana (UCA), Managua	Multiple: FIDA, EU, OXFAM, INTERMON, Christian Aid, CIFOR, APN, etc.	1989 - Long term and short term, depending on the agency
SAREC	5 programmes in 4 universities – Managua	SIDA/SAREC (Sweden)	1986 - Long term
IDRC/ local NGOs	Support to 4 NGOs: INIES,Guises Montana, HumboldtCentre, CIDCA	IDRC (Canada)	1990s - Varies – no guarantee of long term
SUDESCA	Consortium: 3 universities inCentral America; 1 in Denmark	DANIDA (Denmark)	1996 (1981) - Long term: 6 years renewable

Foreign investments declined sharply. Equipment, spare parts and raw materials became scarce. To make matters worse, the war for liberation, which ended Amin's reign in 1979, resulted in widespread destruction and looting of infrastructure and industrial plants. Thus, when Amin fled Uganda in 1979, the nation's GDP was only 80% of the level in 1970; and the real GDP per capita in 1980 was only 62% of that in 1971.[33] By then, Amin's erratic policies had destroyed almost all but the subsistence sector of the economy;[34] the country had become dependent on just one crop – coffee.[35]

As in Tanzania, there was a brief attempt to stabilize the Ugandan economy with donor assistance after the defeat of Idi Amin. The IMF provided support to the Obote government, which took over in 1980 from short-term governments in the interim following Amin's administration. The IMF, however, cut its funding in 1984 because of the country's lack of foreign exchange. Efforts to attract investors back to Uganda were severely hampered by the political turmoil of the early 1980s. The Obote government's military campaign against challengers to the regime proved even more devastating in terms of areas destroyed and lives lost than Amin's eight-year rule.[36] Negative economic growth characterized the period from 1984 to 1986, the year that the National Resistance Movement took over the reins of government.[37] Although guerrilla wars continued, Uganda slowly began to recoup lost ground after 1987. The country became more politically stable, creating favourable conditions for economic activities to thrive. As in Tanzania, the World Bank and the IMF supported Uganda's economic recovery programme.

Politically, Uganda and Tanzania had different experiences in the 1970s and early 1980s. Tanzania had maintained stability and national legitimacy unparalleled by most countries in the region, in contrast with Uganda's political upheavals.[38] A confluence of factors, including the broad support enjoyed by the Tanganyika African National Union (TANU) led by Julius Nyerere, a high degree of political consciousness and a common language (Swahili), accounted for the relative political peace in Tanzania.[39] On the other hand, Uganda's national disintegration after World War II may be traced to a series of divisions within Ugandan society. These include the language gulf between the north and south, the divide between pastoralists and agriculturists; between the centralized and despotic rule of ancient African kingdoms and the kinship-based contemporary politics; and between Christians and Muslims.[40]

Despite fundamental differences in national unity and political climate, independent institutions on the ground such as cooperatives and grassroots organizations did not prosper in either country. Until the discourse of political democratization began slowly during the late 1980s and 1990s, the opportunity for open discussion by opposition parties, trades unions, intellectuals and professional associations had been almost nil. The over-centralization of the state in both countries suppressed private initiatives to organize and develop a politically developed activist culture, a

situation that differentiates the African countries included in the comparative study from their Latin American and South Asian counterparts.

Uganda and Tanzania are among the world's poorest countries. Based on national statistics gathered by the UNDP for its 1999 *Human Development Report*, in 1994 about 55% of Ugandans were living below the official poverty line, compared with 51% of Tanzanians. Table 2 shows that although the proportion of Tanzania's population living below the poverty threshold[41] (16.4%) was much lower than that in Uganda (50.0%), nevertheless, its GNP per capita in 1997 of US$ 260 classifies it among the least developed countries in the world (Table 3). While higher than Tanzania, Uganda's GNP per capita for the same year (US$ 330) was also low, falling below that of the sub-Saharan region as a whole.

Not only are the two African countries covered by this report among the poorest nations, they are also among the most heavily dependent on aid. The level of official development assistance (ODA) as a percentage of their respective GNPs in 1997 (13%) was higher than the average of 11% for the least developed world as a whole (Tables 2 and 3). The two countries are also relatively heavily indebted. Tanzania's external debt, as a percentage of its GNP, is slightly higher (97%) than that of the least developed countries (92%). In this respect, Uganda's level of indebtedness in 1997 was better than Tanzania's, being lower than the figure for sub-Saharan Africa (Tables 2 and 3). Nonetheless, external debt constituted about half of Uganda's GNP.

The prevailing discourses in Tanzania and Uganda reflect the links of the two countries to international financial institutions and the donor community, as well as the economic and political conditions in the sub-Saharan region. Apart from structural adjustment and the effort to increase the competitiveness of the national economy, which had necessarily become part of sub-Saharan Africa's development discourses, development workers and donor agencies in the two countries are also preoccupied with poverty alleviation, sustainable development and gender issues. In Uganda, the need to decentralize and devolve responsibilities for decision-making has also assumed some prominence in public discussions.

2.1.2 Academic and research contexts

The economic deterioration and political problems in Tanzania and Uganda from the 1970s up to the mid-1980s took their toll on the state of education during the 1990s. Both nations had relatively high literacy and school enrolments prior to the 1970s, and boasted first-class universities – Makerere University in Uganda and the University of Dar es Salaam in Tanzania. But by the late 1970s the situation had reversed. The physical infrastructure and quality of education had stagnated. Bagachwa noted the fall in enrolment rates in sub-Saharan Africa, from 8.9% in the 1970s to 4.0% in the early 1980s.[42] He also cited the shortage of supplies of key

Country	Annual population growth rate 1975–97	Urban population as a % of total population 1997	GNP annual growth rate, 1975–95 / (GNP per capita 1997, US$)	External debt as % of GNP, 1997 / (ODA[a] received as % of GNP) / [ODA received in millions of US$ 1997] / <ODA received per capita in US$ 1997>	% of population below poverty line, US$ per day in 1985 / (% below national poverty line in 1994)	Human poverty index[b] 1997	Human development index[c] 1997 / (rank of 174 countries)	Adult literacy rate, % 1997
Bangladesh	2.2	19.4	4.4 / (360)	35.1 / (2.3) / [1009] / < 9.0>	28.5 / (48.0)	44.4	0.44 / (150)	38.9
Bolivia	2.3	62.3	— / (970)	67.6 / (9.2) / [717] / <106.5>	7.1 / —	21.1	0.65 / (112)	83.6
India	2.0	27.4	5.0 / (370)	24.9 / (0.4) / [1678] / < 1.9>	52.5 / —	35.9	0.54 / (132)	53.5
Nicaragua	2.9	63.2	–1.2 / (410)	305.6 / (—) / [421] / <—>	43.8 / (50.0)	28.1	0.62 / (121)	63.4
Tanzania	3.1	25.7	— / (210)	97.2 / (13.0) / [963] / <36.6>	16.4 / (50.0)	29.8	0.42 / (156)	71.6
Uganda	2.7	13.2	— / (330)	6.5 / (12.8) / [840] / < 49.7>	50.0 / (55.0)	40.6	0.40 / (158)	64.0
Vietnam	2.1	19.5	— / (310)	9.4 / (4.1) / [997] / <14.1>	— / (51.0)	28.7	0.66 / (110)	91.9

Table 2. *Selected socio-economic statistics for the countries included in the study.*
Source: United Nations Development Programme, 1999. Human Development Report. New York: Oxford University Press.

Notes:

a ODA: official development assistance.

b The Human Poverty Index is a composite index of deprivation in four basic dimensions of human life: long and healthy life (percentage of people expected to survive to age 40), knowledge (percentage of illiterates), economic provisioning (percentage of the population lacking access to health services and safe water, and the percentage of children under 5 who are moderately or severely undernourished) and social inclusion (long-term unemployment).

c The Human Development Index measures achievements in the most basic human capabilities: leading a long life, being knowledgeable and enjoying a decent standard of living. Life expectancy, educational attainment and income are three variables used to indicate the above dimensions. With normalization of the variables that make up the HDI, the values range from 0 to 1. The HDI value of a country shows the distance that it has already travelled towards the maximum possible value of 1.

Region	Annual population growth rate 1975–97 (%)	Urban population as a % of total population 1997	GNP annual growth rate, 1975–95 / (GNP per capita 1997, US$)	External debt as % of GNP, 1997 / (ODA[a] received as % of GNP) / [ODA received in millions of US$ 1997] / <ODA received per capita in US$ 1997>	Human poverty index[b] 1997	Human development index[c] 1997 / (rank of 174 countries)
All developing countries	2.0	38.4	4.4 / (1314)	36.0 / (0.9) [34,469T] / < 9.0>	27.7	0.63
Least developed countries	2.5	23.8	2.3 / (260)	92.3 / (11.1) [13,041T] / <29.1>	44.9	0.43
Sub-Saharan Africa	2.8	32.4	2.0 / (522)	66.3 / (6.7) [13,726T] / < 33.5>	40.6	0.46
South Asia	2.2	28.9	3.7 / (452)	25.7 / (0.7) [4335T] / <3.7 >	36.6	0.54
Southeast Asia and the Pacific	2.0	24.8	6.6 / (1556)	61.3 / (0.5) [4152T] / <9.2>	25.0	0.69
Latin America and the Caribbean	2.0	74.2	2.8 / (3953)	33.9 / (0.5) [5265T] / <11.4>	14.5	0.75
Industrialized countries	0.6	77.8	2.6 / (27,174)	—	—	0.92
All countries	1.6	46.1	2.8 / (5257)	—	—	0.71

Table 3. *Selected comparisons for the statistics in Table 2.*
Source: United Nations Development Programme, 1999. Human Development Report. New York: Oxford University Press.
Notes: see Table 2

educational inputs such as books and learning materials as indirect evidence of the declining quality of education.

Even more serious than problems of infrastructure and supplies was the shortage of teachers. In Tanzania, the discrimination of colonial policy against the training of the indigenous population, which prevented the growth of a critical mass of Tanzanian teachers, aggravated the state capacity building at the primary and secondary levels of formal education. This problem became even more apparent with the departure of expatriate teachers. The situation was very similar in Uganda. The departure of both Ugandan and expatriate teachers during the 1970s and 1980s resulted in a high proportion (35%) of untrained teachers in 1991.[43]

The worsening quality of primary and secondary education in Uganda and Tanzania was among the factors that accounted for the significant decline in the standards of the two reputable universities, which led the World Bank to bemoan the "state of disrepair" of these universities.[44] Other factors included the "brain drain" (the migration of professionals and university staff who trained in Europe and remained there, or who now work in other regions); as well as the declining budgets and investments in critical infrastructure and research. The poor pay scales and remuneration offered by the universities also forced good academics to augment their incomes through consultancies and other activities outside academia.[45]

The universities in Tanzania and Uganda now engage in very little research. As a consequence, the training of postgraduate students is also very limited. Thus, those who secure postgraduate degrees have very little training in or exposure to research activities. On the other hand, there exists in both countries, a very small group of highly trained researchers who are concentrated in the main urban areas – overwhelmingly in the capitals of the two countries. These researchers can readily obtain the support of donors to do research consultancies in a wide variety of areas. Many of them are linked to the universities but principally engage in consultancy. The polarization of the research community, with a few well-established and highly trained researchers turned consultants on the one hand, and a large pool of potential researchers without sufficient training in the universities on the other, has contributed to the continuing absence of a research culture. An undeveloped research culture was a legacy of the colonial education system and the political economic developments in the last three decades, which found the Ugandan and Tanzanian governments shifting their priorities in the 1970s and 1980s away from the education sector.

2.1.3 The programmes in context

The need to fill a wide gap in the research capacity of Tanzania and Uganda motivated the establishment of the programmes selected for the study. With the exception of the MMRPs and the EPRC in Uganda, the programmes are university-based.

Donor agencies such as SIDA/SAREC and DANIDA have concentrated on building up the research and training units in the main academic institutions. So have the multiple donors who support the MISR programme in Uganda. These donors justify their university-based interventions in the light of the deteriorating state of higher education in sub-Saharan Africa. Moreover, given the relative absence of non-governmental organizations (NGOs), the universities in the two countries still constitute the main source of potential researchers, despite their low educational quality. Hence, the non-university based research capacity building programmes like MISR and REPOA rely on highly trained academic experts.

A comparison of the selected programmes in the two African countries *vis-à-vis* their Latin American and Asian counterparts reveals an interesting feature – the prevalence of policy research in Africa rather than academic or development-oriented grassroots research. In both Tanzania and Uganda, the economic crises in the decade after independence, and the flows of external funds that were contingent on the adoption of structural adjustment programmes, opened up the demand for donor-driven research-oriented policy work. The EPRC, REPOA and to some extent the MISR represent institutions that have responded to the gap between demand and supply for policy research. REPOA, the MMRP in Tanzania, stands out from the other MMRPs because of its emphasis on policy studies, although like the rest it focuses on poverty and on sets its own policy research agenda.

The preference for policy research, which usually takes the form of consultancy work, was reported to have pushed competent university researchers in Africa into a consultancy culture at the expense of research and the training of a potential pool of young researchers.[46] It would, however, be erroneous to conclude that policy research and the culture of consultancy it has spawned among academics are more evident in the two African countries than in Asia or Latin America. On the contrary, government and donor-funded policy research units are equally, if not more significant in the countries included in the study, all of which interestingly did not escape structural adjustments in the 1980s. With some exceptions (e.g. Nicaragua and Vietnam), consultancy cultures are also alive and well in Asia and Latin America. In contrast with Africa, however, the programmes selected in most of the other countries reflect the increasing importance of other types of research.

This situation is partly due to the specific features of the MMRPs in the Asian and Latin American countries, which profoundly affected the choice of comparator programmes. But because the particularities of the MMRPs also reflect the prevailing local conditions, it would seem that the other countries have a wider range of and support for research concerns that include participatory action research. More importantly, the community of researchers with the capacity to develop different thrusts seems to be larger in the Asian and to some extent the Latin American countries (i.e. Bolivia) than in Tanzania and Uganda. However, internal funding for the

science and technology sector in both continents is severely inadequate compared to Western Europe or North America. In other words, it would seem that the countries in Latin America (except for Nicaragua) and Asia are more likely to possess a critical mass of researchers and a relatively better developed research culture than the sub-Saharan African countries included in this study, although differences in academic traditions and research orientations exist.

The wider range of research concerns in the Asian and Latin American countries and the existence of a constituency for them account for the relative significance of donor-initiated alternative research capacity building efforts. Among the latter are the participatory grassroots models in Bangladesh, Bolivia, India and Nicaragua, and the user-aware and conceptually and methodologically grounded research programmes in Bolivia, Nicaragua and Vietnam. In particular, the participatory and applied research strategies that donor agencies began to support in the 1980s seem to have been less well received by researchers in Tanzania and Uganda than by their counterparts in Bangladesh, Bolivia, India (Kerala) and Nicaragua, where development NGOs and an activist culture thrive. Nevertheless, the WRDP/IDS/WSG in Tanzania and NURRU in Uganda have concentrated on building the capacity of women and young researchers, respectively.

Whether the programmes in the two African countries are policy oriented or otherwise, they cover research themes that reflect prevailing international discourses and the problems confronting Tanzania and Uganda. These include poverty alleviation, gender issues, privatization and economic development. Interestingly, these themes are common to the other countries included in the study.

The programmes selected for Africa are as follows:

Tanzania

Research for Poverty Alleviation (REPOA)
DGIS
The REPOA programme is the MMRP in Tanzania. Its general themes include the environment, gender, public policy, sociocultural determinants and technology development. REPOA began its activities with public invitations to submit concept proposals on these themes, which would be awarded proposal development funds and small research grants on a competitive basis. This open competitive system (OCS) was supplemented by short courses on research methodology. REPOA later added another system of disbursing grants, whereby specific researchers are commissioned to work on topics selected by REPOA. Having established an impressive track record in poverty research and in mobilizing some of the country's senior researchers, REPOA has also rendered consultancy work for the government in the area of poverty alleviation. REPOA has participated in high-profile national studies.

It is a member of the Tanzania Assistance Strategy, whose function is to provide a framework for development participation between Tanzania and donor institutions. On the basis of its growing reputation, the programme has attracted other donors.

Enhancing Research Capacity (ENRECA) Programme
DANIDA
The ENRECA programme at the University of Dar Es Salaam (UDSM) is funded by DANIDA. It is a partnership among four institutes – three at the UDSM, and the Centre for Development Research (CDR) in Copenhagen. Each of the three UDSM institutes (Institute of Development Studies (IDS), Institute of Resource Assessment (IRA), and the Economic Research Bureau (ERB)) has had a long tradition of collaboration with CDR. In 1994, an agreement for the joint research programme was made among the four institutes, with funding provided by DANIDA. Phase I of the programme has been completed and negotiations for phase II are under way. The purpose of the programme is to enhance research capacity within the four institutions through sponsored research on different themes for each institute: at ERB, local institutions and service provision; at IDS, gender, social inequalities and agrarian reform; and at IRA, farming systems and local resource management. In this regard, ENRECA has established a sandwich thesis research system in which the candidates collect their data in Tanzania and analyze them abroad. This programme is consistent with ENRECA's preference for training young researchers.

Women's Research and Documentation Programme (WRDP) and Women's Study Group, Institute of Development Studies (IDS/WSG)
SIDA/SAREC
The Women's Research and Documentation Project (WRDP) and the Institute of Development Studies/Women's Study Group (IDS/WSG) are similar in many respects. They have common purposes, structures and management styles, and have collaborated in some of their efforts to build research capacity. Both programmes were included in the study because the WRDP is a private NGO based at the University, while IDS/WSG is affiliated with the university, which to some extent controls the group's resources and influences its agenda. SIDA/SAREC funds gender research in the two programmes. In the past, the two groups applied directly to SIDA/SAREC for research funds, but with the proliferation of university gender groups, SAREC and the groups agreed on the need for a Gender Management Committee (GMC), composed of representatives from each of the seven participating groups. The GMC reviews small project proposals from all the groups and selects a certain number for submission to SIDA/SAREC. Note that the WRDP is quite distinct from the other two programmes studied, in that it arose out of concern for the status of women, both within the university and more broadly, prior to any donor involvement. Both the WRDP and IDS/WSG are different from the other programmes in Tanzania in that they are organizations of limited membership. Although they sponsor seminars and workshops that are open to others, research funds are shared only among members.

Uganda

Network of Ugandan Researchers and Research Users (NURRU)
DGIS
NURRU was launched as an MMRP in 1994 by a group of Ugandan researchers and research users from 25 institutions and organizations who participated in the Uganda–Netherlands Research Cooperation Workshop in Entebbe. These institutions and organizations, which include academic departments and NGOs, were the founding member organizations of NURRU, and a few others were subsequently admitted into the fold. NURRU is now an NGO that is not attached to any institution, and has the explicit objective of promoting participatory action-oriented research, in line with the philosophy of the MMRPs. Covering the areas of household poverty and development conditions and policies, NURRU has an independent research agenda. Advertisements are placed in local newspapers calling for concept proposals and, eventually, full research proposals. Those that fulfil the requirements are awarded research grants to embark on research projects within the pre-set thematic areas. Once the research has been completed, the results are disseminated in workshops held throughout the country, and summaries of the research findings are published in NURRU's newsletter.

Economic Policy Research Centre (EPRC)
African Capacity Building Foundation and other donors
The EPRC is an autonomous, non-profit research institution specializing in economic policy research for sustainable development. It was established in 1994 to enhance the national policymaking capacity, to promote policy-oriented research and to provide a foundation for economic policy formulation, among other things. The programme is governed by a Board of Management made up of senior administrators, leading academics and private-sector managers. It is funded primarily by the African Capacity Building Foundation, a World Bank subsidiary, the Ugandan government and donors such as the Aga Khan Foundation, the European Union (EU), the World Bank, UNDP, and donor agencies in Denmark and the Netherlands. The EPRC conducts research independently or in collaboration with local institutions and consulting agencies. Its research agenda includes poverty alleviation, macroeconomic stability and forecasting, environmental and natural resources management, privatization and public sector management, and food security. EPRC's projects include studies of the impacts of structural adjustment on poverty and incomes, the determinants of regional poverty in Uganda and regional growth disparities and household economic performance.

Makerere Institute of Social Research (MISR)
Various donors
MISR is the oldest of the three research programmes included by the study. It was established in 1948 as the East African Institute of Social Research and became

MISR in 1970. It is now an interdisciplinary centre for both academic and policy-oriented research, with special emphasis on Uganda and other parts of Africa. The MISR research programme targets four major research areas: governance, natural resources management, health care and social policy, and economic development. MISR mostly engages in commissioned research on a project-by-project basis. Unlike NURRU and EPRC, the MISR is not really an autonomous research institution. It was an integral part of Makerere University until it broke away from the Faculty of Social Sciences and gained semi-autonomous status in 1994. The bulk of the MISR's research funds originally emanated from the Ugandan government through Makerere University, with supplementary funding from outside sources. This trend is now changing, with MISR becoming less dependent on Makerere and the government. MISR now receives the bulk of its funds from various international donors, including DANIDA, the EU, the Ford Foundation, IDRC, UNDP, USAID and the World Bank. It has pursued research on the democratic transition, decentralization reform and monitoring poverty in agriculture.

2.2 ASIA

2.2.1 Political economic contexts and development discourses

Bangladesh, India and Vietnam are post-colonial societies with different cultural, political and economic systems, although Bangladesh and India shared a common colonial history up to 1947 when Pakistan (which included Bangladesh) separated from India over religious differences.[47] Until recently, both India and Bangladesh had highly centralized political systems. While their systems of governance were centralized until the 1990s, the two countries reflect a history of successful grass-roots mobilization. NGOs have prospered and proliferated in both countries in recent decades.[48]

Within India, the state of Kerala has hosted two of the programmes described in this report: the KRPLLD and the Secretariat of the Indian UNDP programme. Kerala is different from most Indian states in terms of the communist ideology of its popularly elected leadership, and the significant role played by militant NGOs and people's movements in state reform. Kerala is also noted as a model of effectively delivering social benefits to the poor despite low per capita incomes. It surpasses many developing countries and other states in India with far higher per capita incomes, in terms of education, life expectancy and infant mortality.[49]

As in Kerala, a significant number of development NGOs in Bangladesh have emphasized the empowerment of the poor through a process of "conscientization" (i.e. a cycle of action, reflection and improved action).[50] In relation to Kerala, however, the weakness of the state of Bangladesh has contributed to the scale and the dominant presence of its NGO community in the socio-economic life of the country.

The Bangladesh Rehabilitation Assistance Committee (BRAC), for instance, has grown to be among the largest NGOs in the world since its establishment in the 1970s, and is almost like a parallel small state.

The experience of organizing grassroots movements, which is shared by Kerala (India) and Bangladesh, is new to Vietnam. For almost two decades, from 1954 to 1975, the war for reunification absorbed the country. The exigencies of war enhanced the need for a centralized and militaristic system of governance that discouraged local initiatives. Only in the mid-1980s, with the liberalization of the economy and the adoption of *Doi Moi* ("openness and renovation"), did the inertia of a top-down system of governance slowly give way and NGOs began organizing in Vietnam.[51] To date, however, they are still an insignificant group.

Although Bangladesh made a premature attempt to establish a socialist society, its economy hardly approximated to the Soviet model of centralized economic planning that India (Kerala) shared with Vietnam.[52] Until Vietnam opened up to the global economy in 1986 and a severe balance of payments crisis forced India to borrow heavily from the IMF in 1991, the public sector dominated the economies of both countries. Since then, Vietnam and India (Kerala) have embraced privatization, a market economy and globalization, albeit cautiously. Vietnam, for instance, has pursued a market economy within a socialist philosophical framework. Thus, from the late 1980s to the mid-1990s, Vietnam witnessed a gradual decline in the dominance of state-owned enterprises (their number decreased by half) as the number of private companies increased ninefold.[53]

In contrast with Vietnam and India (Kerala), which are undergoing the transition from centralized to market-oriented economies, Bangladesh is liberalizing its market-oriented underdeveloped economy that has depended heavily on the external assistance of bilateral and multilateral development partners. So important are these institutions to the economy of the nation that a journalist once identified them as stakeholders in the process of good governance in the country.[54] Although Bangladesh is undoubtedly heavily indebted – in 1997 external debts accounted for 35.1% of its GNP – Vietnam's debts constituted a much higher 89.4% of GNP in the same year. Like Bangladesh and Vietnam, India also relies on external assistance, albeit at a lower level – 25% of its GNP in 1997 (see Table 2).

As developing societies, the three Asian countries are predominantly agricultural and poor. Compared with Latin America, where less than half of the population is rural, almost 80% of the populations of Bangladesh and Vietnam and 73% of that of India were living in rural areas in 1997 (Table 2). In each of the three Asian countries included in the study, the share of the rural population is similar to that in the African region.

Economically, the levels of GNP per capita of the three Asian countries are about the same, varying slightly from a low of US$ 310 for Vietnam, US$ 360 for Bangladesh, to US$ 370 for India in 1997 (see Table 2). These figures are higher than the average per capita GNP of the least developed countries (US$ 260), lower than that of South Asia (US$ 452) and way below the US$ 1314 for all developing countries, and the US$ 1556 GNP per capita for Southeast Asia and the Pacific (see Table 3). As expected, the poverty levels in the three countries remain high, although they have declined since the 1980s. In terms of the World Bank's poverty threshold (US$ 1 per capita per day parity purchasing price), India had a higher proportion of people living below the poverty line in 1997 – 52.5%, compared with 28.5% for Bangladesh. There are no comparable data for Vietnam, but its own figure of 51% living below its national poverty threshold is indicative of the country's level of poverty (Table 2).

The Human Poverty Index (HPI) is a composite index that attempts to measure deprivation in terms of four basic dimensions of human life: long and healthy life (percentage of people expected to survive to age 40); knowledge (percentage of illiterates); economic provision (percentage of people lacking access to health services and safe water, and the percentage of children under 5 who are moderately or severely undernourished); and social inclusion (long-term unemployment). Using the HPI, in 1997 Bangladesh had the highest proportion of poor people (44.4%), while Vietnam had the lowest (28.7%), and in India slightly more than one-third was poor (Table 2). On the whole, the Asian countries had higher HPIs than the two Latin American countries (21.1% for Bolivia and 28.1% for Nicaragua). Compared with Africa, Bangladesh had a higher poverty level (in terms of the HPI) than Uganda (40.6%), which surpassed the poverty index of India and Vietnam, but Tanzania's poverty level (29.8%) was lower than India and almost the same as Vietnam. Examining the Human Development Index (HDI), which has a conceptually broader scope, Vietnam ranked highest among the Asian countries (and all the other countries included in the study). Bangladesh ranked lowest, although it ranked higher than the two African countries (Table 2).

Against the above socioeconomic and political backdrop, poverty alleviation has been a dominant discourse in all three Asian countries. In Bangladesh and India, where participatory conceptual frameworks developed and prospered, the participation of the poor in programmes that aim to benefit them was integral to the discourse. For India, which had become increasingly disenchanted with an excessively centralized system of economic planning, the devolution of centralized state power to local governments and the need for grassroots participation at this level were other significant components of the development discourses of the 1980s and 1990s. It has been particularly significant for Kerala, since this was one of the first states in India to implement the corresponding constitutional amendment.

The prevalent discourses and the way they are expressed in India and Bangladesh reflect how the thinking of intellectuals and development workers in these two countries resonated with the evolving models of development being articulated by donor agencies. As noted previously, the outcomes of development assistance extended by the North to the South came under severe criticism worldwide in the 1980s. By then, funding agencies supporting development work had begun to veer away from traditional top-down approaches and to explore participatory strategies. While emergent participatory discourses adopted by donor agencies incorporated the intellectual contributions and advocacies of the development community in Latin America and South Asia, the donor agencies have also significantly shaped the thinking and thrusts of development work in the South. The facilitating role of funding agencies in casting such legitimate development concerns in the South in particular concepts and frameworks, account for the similarities in the thrusts or modalities of development programmes in India (Kerala) and Bangladesh, as well as in other Southern countries.

Unlike in India and Bangladesh, the prevailing discourses in Vietnam from the mid-1980s onwards have not revolved around participatory or local level development, but the economic transition from socialism, poverty alleviation, rural development, and "fast tracking" the country's integration into the modern global economy. Participatory strategies, which had been alien to the social organization of Vietnam in the post-World War II era, are only now beginning to filter into the discourse of academics and government agents. In this respect, donor agencies and the experts they brought to Vietnam to share ideas with the development community have contributed significantly to this development.

2.2.2 Academic and research contexts

Responsibility for research and research funding in India is centralized in federal bodies such as the Council for Scientific and Industrial Research, the Indian Council of Agricultural Research, the Indian Council of Medical Research, the Indian Council of Social Science Research and the University Grants Commission.[55] Although they fund university researchers, many of the research councils have set up their own research institutes. The bulk of government funds for research, therefore, has gone to established researchers from such institutes, and only small amounts trickle down to universities and colleges; hardly any research funds go to NGOs.[56] Consistent with the centralized character of India's political system, government-funded studies generally reflect national or federal research priority areas, with very few focusing on local issues. In this sense, Kerala constitutes a kind of exception insofar as the centrally financed Centre for Development Studies in Trivandrum, the host of two of the selected programmes, has since its inception focused on local issues.

Compared with Bangladesh and Vietnam, India has a much larger pool of researchers in the natural and social sciences. Although it was a forerunner in the

theory of participatory development, the systematic application of scientific research to the study of local issues and to solve local problems was still at the fringe of mainstream research traditions in the mid-1980s, even as the country geared politically for greater local autonomy. Nevertheless, participatory research has developed in India and the potential for building the capacity of young researchers in such development-oriented methodologies has existed for decades now.[57] This situation is particularly true for the state of Kerala, which has been more aggressive than most other states in experimenting with alternative models of science for development. The struggles of the Kerala Sastra Sahitya Parishad (KSSP; the Kerala Science Library Society) to promote a popular science movement are indicative of the level of participatory discourse among the organized grassroots segments of Kerala.[58]

In relation to the two other Asian countries, Bangladesh is closer to India than to Vietnam in terms of its experience with participatory development methodologies. In the mid-1980s its research pool consisted of a mix of Western-trained university researchers and those affiliated with a few research institutes such as the Bangladesh Institute of Development Studies. With the growth and increasing significance of NGOs, and the support they obtained from external funding agencies, some of the university-based researchers shifted to NGO involvement, utilizing participatory frameworks and research strategies in their work.

It is also important to note a parallel development in Bangladesh – the hiring of established researchers by an increasing number of private consultancy firms and donor agencies. This has resulted in the development of a consultancy research culture, whereby the internationally pegged monetary value of Bangladesh senior researchers has come to undermine their more extensive involvement in less well paid development research or capacity-building activities. Although a consultancy culture also exists in India, particularly in Delhi, the presence of a critical social science community with a strong activist tradition in Kerala has constrained the full development of such a culture there. In Vietnam, more and more Vietnamese have been contracted to do consultancy work, although this development is very recent. Moreover, the monetary rewards of consultancies do not seem to accrue to single individuals but tend to be shared with co-researchers and institutions.

The consultancy culture among senior researchers, which is better developed in Bangladesh than in Kerala or Vietnam, is akin to that existing in Tanzania and Uganda. Unlike the two African countries, however, Bangladesh has a thriving NGO community that is committed to a transforming agenda that conceptually puts people at the centre of political processes and democratic decision making. Influencing the direction of research among academics linked to NGOs and the development community at large, such an agenda has served as a counterbalance to a consultancy culture, although perhaps not to the extent that Kerala's activist culture has foiled the development of a system of research consultancy.

With respect to the structure of research, Vietnam has much in common with India. Funds for knowledge production are concentrated in research institutes that are lodged in government ministries. Universities, relegated to the role of teaching institutions, get very little of the pie. It is instructive to note, for instance, that the research budget of an important agricultural university near Hanoi was even smaller than that of one MMRP project in Vietnam. As a consequence, the pool of researchers in the country is found in the research institutes. These researchers, particularly those in the social sciences, have been exposed primarily to the Russian and Eastern European traditions and are just beginning to open up to new development perspectives and methodologies that are evolving within Western social science frameworks.

2.2.3 The programmes in context

All of the research programmes selected for the comparative study were location-specific, i.e. they were shaped by the political economic development and academic cultures of the countries at the time they were established. The commonalities and differences in the thrusts and institutional links of the MMRPs in Asia, for instance, reflect the appropriate national or, in the case of Kerala, the state contexts. The MMRPs in Bangladesh and India, which have longer experience in participatory development work, have established programmes that are more applied and action-oriented. In contrast, the Vietnam MMRP has sought to build social science research skills along more Western lines, since the existence of such skills could not be readily assumed because of the dominance of Russian or Eastern European academic traditions. In the light of decentralization, the Indian MMRP has chosen to build capacity for research attuned to the local needs of Kerala, while the Bangladesh MMRP has focused on the search for research-based policy and action solutions to poverty alleviation.

The nature of the institutional hosts of the programmes in Kerala and Bangladesh also differed due to the prevailing situation in each case. As noted above, in Kerala, decentralization was a critical issue at the time the MMRP was established. The Centre for Development Studies, an academic unit committed to promoting research and developing research capacity in fields that would address local needs, was therefore regarded as an ideal base for a programme focusing on this issue. In Bangladesh, on the other hand, NGOs were performing notable work in developing alternatives to alleviate poverty in the 1980s and early 1990s, and had attracted leaders who were committed to development work rather than the university. On the basis of this work, and the academic backgrounds and status of their leaders, the NGO the Grameen Trust was chosen as the base of the MMRP secretariat.

In Vietnam, the political, economic and academic context explains why the National Institute for Science and Technology Policy and Strategic of the Ministry of Science, Technology and Environment (within MOSTE) was chosen as the base for the

MMRP. In view of the programme's ambitious agenda of building a social science-based capacity for development research as fast as possible, in its initial phase it had to support basic and applied researchers from all over the country and in a wide range of fields. Given the structure of the research community and the meagre support for universities, the Vietnamese MMRP had to be located in a credible research institute that could draw upon prevailing modes of legitimacy.

VISED in Vietnam, the UNDP-funded programme in India and MAP in Bangladesh responded to very specific needs for reliable macro-level inputs to policy formulation in the three countries. For VISED and MAP, strengthening the capacity of key institutions responsible for policy and management was the main motivation behind the creation of the programmes. In the case of VISED, Vietnam's shift to a market-oriented economy and its severe environmental problems (e.g. deforestation and ecological degradation) made it urgent to focus on economic and environment research. MAP's concern with reliable and regular monitoring of the poverty situation in Bangladesh was responsive to the needs of the country. The UNDP-funded programme in India, on the other hand, was a reaction to the overemphasis on economic growth in most macro-level studies there. The focus on in-depth policy and strategic research on human development was also chosen in the context of India's rethinking of development models and alternatives.

It is interesting to note that VISED, MAP and the UNDP programme are contextualized in each of the countries and respond to those countries' needs. However, the three programmes are less location-specific and, therefore, less diverse than the MMRPs. To varying degrees, their conceptual frameworks or strategies are similar to those of programmes funded by the same donor agency in other countries. MAP, in particular, reflects the common framework of the CIDA/IDRC-sponsored monitoring programmes in other developing countries in Asia. Although there may be many different projects, the similarities in specific projects of the UNDP programme in India and like-minded programmes in Asia are due largely to the convergence of disciplinary frameworks and methodologies for viewing the dimensions of human development (e.g. demographics, health, etc.). VISED, on the other hand, adopted the strategy of building policy research units in government agencies supported by CIDA/IDRC, the Ford Foundation, and other funding agencies.

The natural science-based programmes selected in the three Asian countries are the FSRP in Vietnam and the APNLBP in India. Like VISED, MAP, the UNDP programme in India and, to a lesser extent, the MMRPs, their strategies for building research capacity are similar to those of programmes funded by their respective donors in other countries. The FSRP follows the SIDA/SAREC mode of institution building in universities, while the APNLBP is similar to other DGIS programmes in several other countries. Each programme is, however, attuned to the peculiarities of the local context.

Finally, the choice of the RED programme in BRAC can be understood in the specific context of Bangladesh, where the scale of NGOs as social institutions is more significant than in India or Vietnam.

The Asian programmes on which these reflections are based are briefly summarized in the following.

Bangladesh

Programme for Research on Poverty Alleviation (PRPA)
DGIS
The PRPA was the outcome of debates in Bangladesh over the relevance of research to poverty and development issues. Hosted by the Grameen Trust, the PRPA is attempting to formulate a research agenda that will impact directly on the lives of the poor, and is also contributing to the design of innovative macro-policies and institutions that will empower the poor. Like the other Asian MMRPs, the PRPA provides funding support to individual researchers and networks. Research proposals are screened and selected competitively on the basis of their relevance to the research agenda formulated by the programme in consultation with multiple stakeholders. Over the years, the PRPA has supported 190 studies on a wide range of issues, including appropriate technology, gender studies, health, human rights and legal aid and land records. In its choice of projects for funding, the programme seems to favour research that will have explicit and direct implications for concrete action programmes or technologies.

Research and Extension Division, Bangladesh Rural Advancement Committee (RED-BRAC)
BRAC/consortium of donors
Like the PRPA, RED-BRAC is a demand-driven programme. The difference is that the demand is defined according to the priorities of BRAC itself, rather than on the basis of an agenda formulated by the programme in consultation with stakeholders and articulated by individual research proponents, as is the case in the PRPA and the other MMRPs. Because of its involvement in poverty alleviation programmes in various parts of the country, BRAC claims that its priorities are consonant with the needs of people at the grassroots. BRAC's thrusts evolved from its work rehabilitating refugees immediately after the creation of Bangladesh, in community development, and in empowering the poor within a framework of multidimensional and sustainable development. It shares the philosophical underpinnings of the Grameen Trust, the NGO that hosts the PRPA. The research funds of RED-BRAC's research unit constitute 1–2% of the NGO's budget that comes from a consortium of donors and income from its enterprises. In addition, RED's core group of 44 trained

researchers obtains funds directly from donor agencies that commission it to conduct development research. Up to 1998, BRAC had conducted 330 studies, one-third of which focused on poverty issues, and the rest on health and nutrition, education and economics.

Monitoring Adjustment and Poverty (MAP)
IDRC/CIDA
The research agenda of MAP, like those of its counterparts in other countries, aims to address the problem of limited data and the lack of an institutional framework for monitoring the many dimensions of poverty on a regular basis. Such shortcomings have made it difficult for policymakers and planners in Bangladesh to assess the impacts of policies and programmes, including structural adjustment policies, on the poor. MAP is engaged in research to develop a poverty monitoring system, and provides training for the staff of national institutions to develop their capacity to analyze the data using economic models and a computerized information system, in order to provide feedback for policymakers. Between 1994 and 1998, MAP contracted researchers from universities, research institutes, government offices and NGOs to undertake 35 projects on poverty alleviation and social development. MAP is hosted by the Centre for International Rural Development for Asia and the Pacific, which was created in 1979 to stimulate new thinking and approaches to rural development for its 13 member countries.

India

Kerala Research Programme on Local-Level Development (KRPLLD)
DGIS
The thrust of the KRPLLD was chosen in line with the devolution of the powers and responsibilities of the federal government to local administrative units (panchayats and municipalities) as enshrined in the 73rd and 74th amendments to the Indian Constitution in 1993. Like the other Asian MMRPs, KRPLLD provides training and funding support for individual researchers and networks. Project proposals are screened and selected on the basis of their relevance to the research agenda formulated in consultation with stakeholders in the state of Kerala. KRPLLD supports a wide range of applied and action-oriented research, in terms of the areas covered and the number and the backgrounds of the researchers. As of 1999, the topics covered by the 198 research projects included health and rehabilitation, sanitation, drinking water supply, water quality, indigenous medicine, education, culture, media and the arts, housing, energy, environment and biodiversity, local level planning, and women's studies. Only 45% of the researchers have research degrees; KRPLLD supports college-affiliated teachers and activists in the NGO community as well. The programme is located in the Centre for Development Studies in Trivandrum.

Andhra Pradesh–Netherlands Biotechnology Programme (APNLBP)
DGIS
The APNLBP is a scientific research programme that aims to improve the status of small-scale farmers and processors through the development and application of appropriate biotechnology in the semi-arid farming systems of Andhra Pradesh. The programme advocates a participatory approach in the application of science and technology for development. This emerged from critiques of biotechnology in both developed and developing countries, and the asymmetry in biotechnology research between the North and the South, and within the South. The programme focuses on four areas: agroforestry, tree crops, horticulture and sericulture (silkworms); food grains and pulses; oil seeds; and animal husbandry. The programme has called on various stakeholders, including scientists, farmers and farmers' representatives, to refine the identified priorities and to select specific projects for funding. The programme has so far supported 42 projects undertaken by researchers in universities, research institutes, government agencies and even NGOs. The APNLBP is hosted by the Institute of Public Enterprises (IPE), an autonomous institute engaged in research, training and consultancy in the broad areas of management and social sciences.

Programme on Strategies and Financing for Human Development
(referred to throughout this report as the UNDP programme)
The UNDP programme aimed to address poverty in India through research on aspects of human development such as education, health care, food security and social security that have been neglected in the development literature due to the overemphasis on economic dimensions. The programme intended to develop a research agenda on the basis of "state of the art" papers on key areas of human development. It therefore identified and commissioned qualified young social scientists from institutions across the country to conduct research projects, and involved key persons from federal and state agencies, parastatal organizations, NGOs and social activists in the implementation of research-based human development strategies. Until the untimely demise of its national programme coordinator, the programme supported 63 research projects in the areas of access to and pricing of health and education; social protection (including food security) for vulnerable groups; and demographic transition and development alternatives. The project sites were concentrated in Kerala, Tamil Nadu, Maharashtra and New Delhi. Although the programme attracted a few young researchers, most of the principal investigators (41) were established researchers and economists. The Centre for Development Studies in Kerala hosted the programme.

Vietnam

Vietnam–Netherlands Research Programme (VNRP)
DGIS
The VNRP was established in the context of Vietnam's transition from a command to a market economy, and the need expressed by the state for natural and social scientists to build development institutions that could help carry out the transition. At the outset, the VNRP aimed to build the capacity for applied research on a wide range of development issues – economic innovation and development, socio-economic reform, the environment and development, rural development, and gender and development. However, the range was later narrowed to sustainable rural development, incorporating gender and environmental considerations. Like the other Asian MMRPs, the VNRP provides training and funding support for individual researchers and networks whose projects are screened and selected on the basis of their relevance to the research agenda formulated in consultation with multiple stakeholders. In the first phase, the VNRP supported researchers from various sectors, and a significant number of non-researchers. Problems of quality and the need for more tangible results in capacity building impelled the programme to focus on young researchers based in universities, which receive meagre state funding compared with research institutes. Thus, in the second phase, the programme focused on training, close research monitoring and networking among researchers. The VNRP, whose Secretariat is hosted by the National Institute for Science and Technology Policy and Strategic Studies (MOSTE), has funded a total of 91 projects since its inception.

Farming Systems Research Programme (FSRP)
SIDA/SAREC
The FSRP was established after a decade of research collaboration with Vietnamese scholars in the form of projects initiated by Swedish research institutions and subsequently managed and coordinated by the Swedes. Since the traditional mode of research collaboration had little impact on the research capacity of the Vietnamese counterparts, the FSRP aimed to develop the research capabilities of the collaborating research institutions. These were three universities (the University of Agriculture and Forestry, Ho Chi Minh City; Can Tho University and Hue University) and one research institute of the Ministry of Agriculture and Rural Development (the National Institute of Animal Husbandry, Hanoi). By providing training and laboratory and other research facilities, the programme is attempting to improve the efficiency and productivity of livestock farmers within the context of sustainable, integrated smallholder systems that make optimal use of locally available resources. In response to emerging frameworks in agricultural research, the focus of the programme's third phase has shifted from the use of local resources for livestock feed to integrated farming systems, and from short-term research to advanced training at MSc and PhD levels. As an integral part of the training the faculty concerned con-

ducts on-farm/station scientific research. The target groups are resource-poor rural farmers. In order to break down the parochialism that characterizes region-based agricultural research in Vietnam, the FSRP encourages cooperation among the research institutions in its network. The FSRP has trained 21 researchers in its MSc and PhD programmes.

Vietnam Sustainable Development Programme (VISED)
IDRC/CIDA
VISED was conceptualized by IDRC in consultation with members of the research communities and the Ministries in Vietnam that host the relevant research institutes (e.g. the Institute of Finance and the Institute for Economic Management). VISED aimed to assist policymakers in Vietnam by building the capacity for policy research in four priority areas: economic reform; environmental and natural resources management; science and technology management and reform; and legislative reform. The programme also aimed to strengthen the key institutions responsible for policies and management in the priority areas, and to foster domestic and international research cooperation. The first phase of the programme officially ended in 1996. Although a subsequent programme, Vietnam Economic and Environmental Management, is not officially regarded as the second phase of VISED, it has nevertheless built upon VISED's work. The programme supported 33 projects in the course of its life. VISED was located in the Ministry of Science, Technology and Environment.

2.3 LATIN AMERICA

2.3.1 Political economic contexts and development discourses

Like most of the other Asian and African countries included in this study, Bolivia and Nicaragua are post-colonial societies with turbulent political economic histories. Although Bolivia gained its independence from Spain in 1825, after almost three centuries of colonial rule, the new republic experienced political instability and territorial wars with neighbouring countries for a further 110 years. The wars reduced the size of Bolivia and discredited the traditional oligarchy, thereby paving the way for a series of coups and the establishment in the 1930s of Bolivia's Nationalist Revolutionary Movement (Movimiento Nacionalista Revolucionario, MNR).[59]

With the popularly supported of indigenous miners and peasants, the MNR spearheaded one of Latin America's three most significant agrarian revolutions in the 20th century.[60] Following the economic decline and social unrest of the post-World War II years, in 1952 the Mexican-inspired Bolivian Revolution led to sweeping land reforms and the nationalization of the tin industry, which had dominated the Bolivian economy since the early twentieth century.[61] But by the mid-1960s, the left-wing MNR control over civilian government gave way to a series of military coups that saw ten dictators, the most notorious of whom, Garcia Meza, seized power in 1980 to

prevent a democratically elected MNR leader from taking over government. Meza's brutally repressive regime and deep involvement in cocaine trafficking isolated Bolivia internationally and resulted internally in a general strike that brought the country to the brink of civil war, forcing the military to oust Meza and allow a transition to civilian rule by 1982.

Throughout the post-revolution military coups and guerrilla warfare, the Bolivian economy nevertheless grew modestly, with a brief period of accelerated growth in the 1970s. But by the 1980s it had floundered and the bankrupt democratic transition government could not save it. Amidst widespread discontent and nationwide strikes, the country reeled from Latin America's first recorded hyperinflation (which reached as high as 24,000% in 1985). Bolivia's per capita income in 1985 had fallen below its 1965 level.[62]

The change of government in mid-1985 broke the momentum of the economic downturn. Subscribing to a neo-liberal economic model, the Estenssoro administration implemented an austere stabilization programme that deregulated the economy, legalized the dollar, eliminated subsidies, imposed a wage freeze and radically restructured the public sector. Interestingly, this was the first attempt to adopt a stabilization programme in the country. Successive governments had negotiated six tentative stabilization programmes with the IMF between 1979 and 1985, although they were not implemented because of strong opposition and the lack of political continuity.

The success of subsequent administrations in reducing the hyperinflation rate to 10%–20% in 1985 and to 6% in late 1989[63] reinforced their espousal of a neo-liberal economic policy framework. Despite achievements associated with the stabilization programme, the export-dependent Bolivian economy remained vulnerable to crisis. The collapse of the tin market in the last quarter of 1995 broke the back of this dominant industry and, together with the Estenssoro government's austerity programme, contributed to job losses of between 11.5% and 25% of the labour force. The economic distress associated with unemployment and the restiveness of those directly affected by the crisis and government's stabilization programmes led to two features that are still highlights of the contemporary Bolivian political economy. First, the informal sector, particularly the coca and cocaine industry, plays an important role in propping up the economy,[64] and second, the government's practice to impose a state of siege, banning strikes, demonstrations and public meetings for 90 days, when faced with impending protests.

The latter practice, to which government administrations have resorted even in the period of neo-liberal democratization, reflects the relative strength of Bolivian civil society. Its long history of leftist-inspired struggles since the 1930s and the growth of NGOs in the 1970s in response to church initiatives in defence of peasants, have

contributed to the organization and mobilization of various groups in the country. In this respect, Bolivia differs from the African countries covered by the study, but shares common features with Nicaragua and the Asian countries, particularly India (specifically the state of Kerala) and Bangladesh. In Asia and Latin America, the countries studied have evolved a thickening web of grassroots organizations that form short-lived political alliances through networks of kindred organizations.[65] Their discursive underpinnings include Marxism, the cooperative movement, feminism and liberation theology (in Latin America).

These discourses and the vigorous organizing activities in the post-war decades have contributed to higher levels of political consciousness among grassroots communities and sectoral groups in Latin America and Asia. This does not seem to have been the case in the African countries, however. Despite similarities in the ideological underpinnings of Tanzania in the 1960s and some of the other countries included in this study, state power was concentrated in one political party immediately after independence. Even though the party was socialist in orientation, the concentration of power may have dampened initiatives to expand grassroots organizations, which in the other countries developed in an adversarial position to the state. In Uganda, on the other hand, military repression led to revolts, but the level of politicization seems to have been much lower.

The roots of the Leftist-inspired grassroots organizations in Nicaragua may be traced to the 1920s, when the United States recalled its marines, sparking a liberal-conservative fight between the forces of Augusto Cesar Sandino and Anastasio Somoza Garcia. But these roots grew in the late 1960s, in direct opposition to Anastasio Somoza Debayle, whose family owned or controlled most of Nicaragua's strategic resources and enterprises between 1936 and 1979. The organizations were eventually established, led or consolidated by the Sandinista National Liberation Front, which engaged the state in violent struggle, forcing Somoza Debayle to flee Nicaragua in 1979.[66] Interestingly, the Sandinista revolutionary government favoured the growth of mass organizations, but at that time they had not yet achieved the autonomy they needed to perform their role *vis-à-vis* the Sandinista regime.[67] Only in the 1990s did more autonomous NGOs and grassroots organizations begin to proliferate.[68]

After the successful Sandinista Revolution, which saw the confiscation of Somoza's lands and the expansion of public ownership in most areas of the economy, Nicaragua went through a period of political instability brought about by the continuing tension between revolutionary and counter-revolutionary or "Contra" forces.[69] The intensification of the Contra war led to the diversion of funds away from social and economic uses to counterinsurgency activities.[70] Sandinista tolerance for political pluralism also waned and the government found itself banning criticism and the

organization of opposition groups, despite its bid to pursue a direct model of democracy[71] based on grassroots movements.

Even more devastating, however, was the overall impact of the Contra war on the unstable Nicaraguan economy. Although the rebuilding of the economy at the end of the civil war resulted in a GDP growth rate of 5% in 1980 and 1981, economic growth then declined. There were many reasons for this, including the reluctance of foreign banks to lend money, the 1985 US embargo on Nicaraguan goods, and war expenditures, which induced a hyperinflation rate of 14,000% annually in 1988. As a consequence of political economic actions and the damage caused by a hurricane in 1988, whatever gains had been made in the first few years of the Sandinista government to enhance the quality of life of Nicaraguans were wiped out by 1990.[72] The economic situation worsened to the extent that by mid-1988 the Sandinistas were forced to launch a drastic economic adjustment programme as a condition for the resumption of external aid.

Furthermore, the bankruptcy of the government and the loss of support from the economically suffering Soviet Union impelled the Sandinista government to call early national elections. A new government, led by Chamorro, with a neo-liberal, private sector-driven economic framework took the helm in 1990. But the new government's attempt to impose standard IMF policy measures (which were implemented in other countries in the study) met with fierce resistance from the masses, reflecting once again the level of politicization and grassroots organization in Nicaragua. The crippling strikes in the wake of the IMF-inspired 1990 economic plan made it imperative for the new Chamorro government to abandon or defer most of its proposed market reforms. In later years, the government would put on hold structural adjustments not only because of widespread protests but also because of natural disasters such as Hurricane Mitch (1998), which caused US$ 1 billion in damage. Against this backdrop, the interface of neo-liberal and Leftist discourses has not been as apparent in Nicaragua as elsewhere. In comparison, a neo-liberal democratization rhetoric was uneasily juxtaposed in the Bolivian revolutionary nationalist discourse of the 1950s.[73]

Both Bolivia and Nicaragua are among the poorest and most heavily indebted countries in Latin America. Although their per capita incomes are higher than in the other countries in the study, Bolivia is the poorest country in South America, while Nicaragua is the poorest in Central America. Of the two, Nicaragua is the poorer, with a GNP per capita in 1997 of only US$ 410, compared with US$ 970 for Bolivia, and US$ 3953 for Latin America and the Caribbean as a whole (see Table 2). According to national figures, more than half of the populations in Bolivia and Nicaragua are living below the poverty threshold. Comparable UNDP data for all countries show, however, that the proportions of poor people in terms of the Human Poverty Index are much lower than in the other countries included in this study, yet they are

higher than in their Latin American and Caribbean neighbours. As for indebtedness, in 1997 external debts constituted about 305.6% of the GNP of Nicaragua and 67% in Bolivia (Table 2). Both figures are much higher than the 33.9% for Latin America and the Caribbean countries as a whole (Table 3).

Bolivia and Nicaragua differ in ethnic composition. The former is far more ethnically diverse; 60% of its population consists of indigenous peoples comprising more than 30 ethnic groups. In contrast, Nicaragua is more homogeneous, with 86% of the population consisting of *ladinos* – people of European or mixed European and indigenous descent who share a Hispanic culture.[74] This explains the salience of discourses related to indigenous peoples in Bolivia but not in Nicaragua.

On the whole, the development discourses in the two countries resonate with those found in the other countries included the study. Those related to democratization, however, are far more salient in Bolivia and Nicaragua than in the other countries where the MMRPs are located. It is also notable that the discourses and the language in which development is discussed are carried by NGOs and strong grassroots organizations.

2.3.2 Academic and research contexts

The interviews conducted by the country teams in Bolivia and Nicaragua reveal that the higher education institutions in both countries are primarily teaching-oriented and obtain very little funding support from government. In Bolivia, for instance, the national expenditures on science and technology (S&T), as percentages of GDP, were 0.1% in 1982, and 0.3% in 1992, representing about US$ 20 million.[75] This rate remained practically at the same level in 1996: 0.33%.[76] In public universities, where about 80% of the research in Bolivia is carried out, the proportion was no better: only 7.44% of their budget in 1995 was directed to research.[77]

The Nicaraguan higher education institutions (HEI), on the other hand, are entitled by law to 6% of the national budget, although some of the rectors interviewed claimed that they receive less than this amount for academic activities including research. Like Bolivian universities, the Nicaraguan HEIs are teaching-oriented. Research undertakings are quite rare in view of the low proportion of university faculty staff with graduate degrees. While resource persons estimate that only about 12% of the faculty staff do research in Bolivia, the figures for Nicaragua may be even lower since very few professors have MSc or PhD degrees, and there are fewer graduate programmes.[78]

The differences in the state of higher education and research between Bolivia and Nicaragua partly reflect the histories of their education systems since 1945. When the Sandinistas took over Nicaragua's government, they inherited one of the poorest education systems in Latin America. Due to general poverty and limited spending on

education during the Somoza regime, only 22% of those who enrolled in the first grade completed primary education after the revolutionaries took over. Of this group, very few adolescents enrolled in secondary school as they were pushed into the labour market to help their families make ends meet. As a result, 75% of the rural population was illiterate in 1979. Although the Sandinista government drastically increased expenditures on education, launched a massive literacy campaign that reduced the illiteracy rate from 50% to 23% of the population, and promulgated a development-oriented curriculum, the Contra war eroded many of these gains. Thus, Nicaragua remained relatively undereducated as late as 1993.[79] Although Bolivia shares many of the education-related problems of Nicaragua, its population was relatively better educated in the 1990s. Because of efforts made before World War I to lay the foundation for a contemporary public education system,[80] the illiteracy rate on the eve of the 1952 Bolivian revolution was much lower than that of Nicaragua in 1979.

In terms of research areas, both countries provide only marginal support for social science programmes compared to the natural science and technology sector, which receives a larger proportion of government funds. The Bolivian Country Report, for instance, notes that in 1984 around 90% of the research investment went to the natural sciences and engineering, in which fields about 83% of researchers and technicians in the public university system are concentrated.[81] As a consequence, the few graduates of social science programmes leave the country in search of professional opportunities, or find employment in development NGOs, which have not always been open to research. The majority of these NGOs are aimed at direct action. Depending on foreign financial support, many of them are short-lived and have no interest in research, due to other pressing social problems they have to deal with.

Regarding the institutional base for research, research activities in Bolivia are dispersed among universities and independent research centres engaged in development-oriented work, such as CEBEM, CEDLA, CERES, CESU and IISEC. NGOs have also become alternative research sites, but for the most part, NGO research in Bolivia is primarily geared toward action, much like the PRPA and RED-BRAC in Bangladesh. Only in a few cases are the research components of projects diagnostic in approach. Judging from the proliferation of NGOs in Nicaragua, the channelling of funding support for development work to them, the employment of Nicaragua's educated sector in these organizations and the severely inadequate funding for universities, a significant proportion of the limited research activities may be conducted by NGOs.

2.3.3 The programmes in context

The research programmes selected for Latin America consist of six university-based (SAREC-Bolivia PROEIB and CEPLAG in Bolivia, and NITLAPÁN, SAREC-Nicaragua and DANIDA-SUDESCA in Nicaragua) and five NGO-based programmes (PIEB,

FTPP, PIRN in Bolivia, and ADESO and IDRC in Nicaragua). With the exception of CEPLAG and SIDA/SAREC-Nicaragua, which focus on research capacity building in the natural sciences and engineering, most of the programmes are social science based. It is interesting to note that of all the SIDA/SAREC-funded programmes in the seven countries included in the study, only the one in Bolivia focuses on the social sciences.

Like their counterparts in Asia and Africa, the Latin American programmes are all geared towards the needs of the countries involved and are explicitly development oriented. The demand for them has emanated from universities, NGOs as well as local communities. As a result, their thrusts reflect the most relevant issues and discourses in the two countries. For instance, PROIEB and PIRN in Bolivia are particularly sensitive to indigenous peoples, a focus that is not shared by any other programme in the study.

The explicit development orientation of the research programmes in Latin America is to be expected in view of the high level of politicization and activist experience of significant segments of the populations in the two countries. These factors also account for the widespread acceptance of participatory frameworks even among the more academic programmes like those funded by SIDA/SAREC, DANIDA and Belgium (CEPLAG), which incorporate elements of a participatory development discourse into their procedures or work plans. Interestingly, the ADESO programme is keen on formulating procedures that embody the principle of participatory democracy as originally envisaged by the Sandinista Revolution. It subjects major decisions on details of the research programme to a General Assembly, many of whose members are from grassroots communities. The other programmes are less radical in this respect.

Although they adhere to participatory development frameworks, some of the selected Latin American programmes do not concentrate on building capacities for participatory and action-oriented research *per se*. The SIDA/SAREC-Bolivia programme and PIEB, for instance, take pains to provide potential researchers with a grounding in social scientific theories and in empirical research methodologies. PIEB, in particular, highlights the need for development-oriented social science research with a solid substantive basis, in the context of a discursive activist setting in which journalistic or anecdotal accounts with very little conceptual and empirical grounding pass as research. Such a capability for theoretically and empirically grounded studies is deemed even more imperative given the significance of NGOs as research sites in Latin America. Potential researchers with such capabilities can draw wider conceptual and methodological implications from NGO-sponsored studies that are often narrowly focused to guide action.

The programmes that the researchers examined in Latin America are as follows:

Bolivia

Programa de Investigación Estratégica en Bolivia (PIEB)
DGIS
PIEB, the MMRP in Bolivia, was officially set up in May 1995. Since then, it has pursued two main objectives: to foster the development of social sciences by conducting research of social relevance and academic quality, and to provide an impetus to long-range strategic research which will influence both local development and the formulation of public policies. In 1995, PIEB's research agenda focused on four themes: (1) actors and social relations in their daily life; (2) productive transformation, social integration and sustainable development; (3) democratization and state reforms in a pluralistic society; and (4) cultural transformations and communication. PIEB has issued several national calls for project proposals with the caveat that at least two young researchers should be trained for each approved project. After three such calls, however, the programme began actively to recruit and train young researchers, and to shift its focus to building research capacity in regions with less well developed research traditions. This focus explains PIEB's emphasis on training workshops, courses on project formulation and networks of libraries and documentation centres.

Forest, Trees and People Programme (FTPP)
FAO
The FTPP is hosted by CERES, an independent research centre with expertise in natural resource management, and is funded by the FAO international programme (the support for Bolivia is part of the Netherlands cooperation). Like PIEB, the FTPP pursues three clusters of activities, in line with its overarching goal of community-based management of forests for sustainable development. These clusters are: (a) research aimed at the development of concepts, participatory methodologies, and tools to enhance community participation in planning and action for community-based forestry; (b) training to promote the development of human and institutional resources to develop and disseminate such methodologies and tools; and (c) the dissemination of information. Its research and training activities focus on developing and disseminating participatory methodologies based on traditional knowledge in association with community management of the forests. Within FTPP's framework, research is not restricted to the analysis of community "problems", but also aims to develop concepts that could be used in the analysis of and search for alternative ways of solving identified problems in areas ranging from food safety, gender, landholdings and local knowledge. To reach as many regions of Bolivia as possible, the FTPP has promoted national and regional networks of focal points in community forestry.

Proyecto de Investigaciones en Recursos Naturales (PIRN)
DFID
The Research Project on Natural Resources (PIRN) is conducted in collaboration with the Consejo de los Pueblos Indígenas de Bolivia (Council of the Indigenous Peoples of Bolivia, CIDOB). Established with support from DFID, with CIDOB as its executive agency, PIRN aims to recover indigenous knowledge related to the sustainable use and management of natural resources, as well as to promote local development using this knowledge. The programme provides training in information gathering and research methodologies for local Indians to enable them to recover and reintroduce their lost technologies. PIRN works with a scientific advisory group, which selects projects by means of a competitive process that includes calls for projects and peer review. PIRN provides support in improving approved projects, and demands a strong commitment from the communities involved. Decisions about each project, such as the duration and whether a follow-up stage is warranted, are taken by the indigenous community concerned. Like PIEB and FTPP, PIRN provides methodology and management training for researchers and their staff, as well as for members of the indigenous communities.

SIDA/SAREC programme in Bolivia
SIDA/SAREC
Unlike in Vietnam and Nicaragua, the SIDA/SAREC programme in Bolivia is in the social sciences. SIDA/SAREC originally supported capacity building efforts in two independent research centres, CERES (beginning in 1978) and CEBEM (1989). Located in Cochabamba, CERES aims to develop the local capacity for more balanced theoretical sociological work and empirical anthropological research. CERES is engaged in research, training and consultancy, and in assisting grassroots organizations. In addition, it is building up a documentation and information centre. Its research and training activities focus on environmental and demographic issues. The second centre, CEBEM, was created in 1989 in La Paz, with support from SIDA/SAREC to develop multidisciplinary research and teaching at the postgraduate level in the areas of democracy, state and political system; public policies and development alternatives; environmental management; and urban and local development. In the new phase of cooperation between Sweden and Bolivia, the programme concentrates on technology and social sciences at the Universidad Mayor de San Andrés (UMSA, La Paz) and the Universidad Mayor de San Simón (UMSS, Cochabamba). During this phase, CEBEM and CERES researchers will be involved in teaching and tutorships for MSc and PhD students.

Bilingual Intercultural Education Programme (PROEIB)
GTZ
PROEIB is a supra-regional project for human resources development in five Latin American countries: Bolivia, Colombia, Chile, Ecuador and Peru (Argentina should have joined by 2000). The Bolivian component consists of a Masters course in inter-

linguistic intercultural education, carried out at the Universidad Mayor de San Simón (UMSS). PROEIB Bolivia is supported by GTZ in the context of a bilateral technical cooperation agreement, and involves the participation of counterparts in Bolivia and the other countries. GTZ provides resources for the institutional infrastructure and four foreign professors participating in the MSc programme at UMSS. The university provides administrative personnel, as well as four permanent, one temporary and other professors. The participating countries offer fellowships for their respective students. PROEIB fosters a network of institutions working on the subject of indigenous peoples, particularly on bilingual intercultural education (EIB) for the Andean countries. In 1999, this network included 19 universities, 20 indigenous people's organizations and five ministries (GTZ, 1999). Research is integrated into the training activities, but is rather weak.

Centre of Planning and Management (Centro de Planificación y Gestion, CEPLAG)
Belgian–Flemish Cooperation Agency
The bilateral cooperation between Belgium and Bolivia started in 1989, with the Universidad Mayor de San Simón (UMSS) as partner. The programme was articulated around four focal points: (a) health, particularly tropical pathology (University of Amberes and UMSS); (b) an hydraulics laboratory that will address problems related to water and energy (University of Louvain, UMSS and a municipal company); (c) geotechnology; and (d) soils and materials. Under this cooperation programme Belgian professors participate as individual researchers, following their own interests, in projects negotiated with UMSS. This model is analogous to some other cooperation arrangements, such as the Dutch cooperation through bilateral agreements, except that in the latter case, negotiations are conducted at an institutional level by the participating universities. One of the main results of this cooperation is expected to be the creation of high-quality research centres focusing on local issues and interests. In the area of natural resources, a research centre (CEMAR) was established and has been operating since 1997. In the case of CEPLAG, however, the negotiation process began in 1996, but because of serious conflicts between Belgian and Bolivian professors it was launched only in early 1998. CEPLAG's objective is to develop a research culture and an academic qualification in UMSS. It hopes to build research capacity that will enhance planning and management for the social and economic improvement of the region.

Nicaragua

Associación para el Desarollo Sostenible de Las Segovias (ADESO)
DGIS
The implementation of the new Netherlands policy for development cooperation in Nicaragua started in 1993, when DGIS officials invited local groups to discuss the establishment of an MMRP in the Las Segovias region. The mayor of Estelí sent out

invitations to the first meeting, which was attended by representatives of 70 local organizations. In a series of subsequent meetings, stakeholders identified five issues that they considered crucial to the development of their region: (1) technological and economic changes in small-scale farming; (2) gender, women and the environment; (3) natural resources and the environment; (4) population and local development; and (5) small-scale industrialization. Due to the high level of political polarization among the organizers, ADESO was created as an autonomous body representing 32 local organizations, which include grassroots movements, NGOs, government agencies, universities and private consultants. ADESO does not conduct research itself, but supports research work that will contribute to the development of the Las Segovias region. ADESO announced a competitive call for proposals, but in the early years found that most of the proposals were submitted by researchers from the capital Managua. Since the programme aims to build research capacity in the Las Segovias region, it opened parallel calls for proposals from Las Segovias and improved the training for local researchers. In addition to supporting research, ADESO has created a documentation centre.

Instituto de Investigación y Desarrollo, Universidad Centroamericana (UCA), NITLAPÁN - Tiempo de Sembrar (NITLAPÁN)

Various donors

NITLAPÁN is a research and development organization that operates within the Universidad Centroamericana (UCA) but is administratively autonomous. The institute started operations in 1989 and is now one of the most important research and development organizations in Nicaragua. According to a NITLAPÁN official, their main goals are: to contribute to the reactivation of, as well as structural change in the national economy by means of concrete development projects and support for social actors in terms of economic organization and accumulation. NITLAPÁN focuses on development projects, research projects, and capacity building. The institute tries to fulfil its mission through local development programmes, research and consultancies, by constituting and organizing small- and medium-sized enterprises in rural and urban areas. In this regard, the programme has created a credit organization for small enterprises. NITLAPÁN's research department disseminates information on new technologies for application in agriculture and small agribusiness. In recognition of the fact that farmers without title to their land are unlikely to apply for credit, NITLAPÁN has introduced a legal service to help improve land tenure conditions. The programme has had a long history of cooperation and receives funding from various donors.

SIDA/SAREC programme in Nicaragua

SIDA/SAREC

The emphasis of the SIDA/SAREC programme is capacity building for development research in Nicaraguan universities. SIDA/SAREC finances five cooperation programmes in four universities: the Universidad Nacional de Ingenería (UNI; chemical

and electrical engineering), UNA (agriculture), CIGEO (geological sciences), and UNAN (the environment). The main component of the Swedish cooperation policy is to provide training for faculty members. As part of this effort, SIDA/SAREC has also funded two recent studies on the status of higher education in the country. One purpose of these studies was to assess the impact of the recent efforts to reform the university system, particularly the decision to group all the engineering courses in one university. In connection with an agreement between the Royal Swedish Institute of Technology and the UNI to build local capacity in areas relevant to local industry, the programme has established "sandwich fellowships" in the areas of drying technology, extraction and crystallization. The SIDA/SAREC programme claims to address local problems and needs.

IDRC support for NGOs
IDRC
Unlike SIDA/SAREC, IDRC does not have an office, a programme or even a clear cooperation policy in Nicaragua. Nonetheless, this agency has established an important presence in the country. IDRC has established partnerships with several local NGOs and government agencies and has transferred significant funds to them. During the fieldwork for this study, the country team visited four of IDRC's partners that conduct research: the Institute for Economic and Social Research (INIES), Guises Montana, the Alexander Von Humboldt Centre, and the Atlantic Coast Centre for Research and Documentation (CIDCA). Despite the lack of a clear cooperation policy, all the projects financed by IDRC focus on environmental issues and have a strong social science component. INIES is an autonomous research NGO, although academically linked to the UNAN. INIES undertakes applied research and implements development projects. Guises Montana works in the Rio Coco region in the southwest of the country. In line with its mission to improve the quality of life of the local population, they not only emphasize development projects but also conduct research, when necessary, in areas such as local vegetable fibres, freshwater shrimp breeding, extraction of plant oils, and genetic breeding of maize. The Alexander Von Humboldt Centre focuses on local development and environmental management and, in partnership with NGOs and municipal governments, on participatory land use planning and local capacity building. CIDCA, which is academically linked to the Universidad Centroamericana, works on the eastern coast of Nicaragua to retrieve and record local history.

SUDESCA programme
DANIDA
SUDESCA is an innovative research and capacity building programme in the field of innovation and technological change. It is part of a broader cooperation effort involving three institutions in Central America (Costa Rica, El Salvador and Nicaragua) and one in Denmark. In the first phase of the programme (1993–99) two students from Nicaragua, two from El Salvador, and three from Costa Rica were

trained. Five have obtained a PhD and one an MSc. These students attended classes in Denmark and did the research work in their home countries. In the second phase, which began in 1999, efforts are focusing on consolidating the network of researchers and institutions involved in the project. The goal is to upgrade the graduate programmes in the three universities. In Costa Rica, where there is an MSc programme, they will create a PhD programme. In Nicaragua, where there is no degree programme, they will create an MSc programme. In El Salvador, they will establish a post-collegiate programme but will not yet grant a formal university degree. During the first phase, the Nicaraguan researchers carried out research on the forest and textile industries, and in this second phase they will expand the research areas and include students in the programme. These students will receive fellowships to attend graduate school in Costa Rica.

3 Modalities of donor-initiated research capacity building in the south

3.1 Constructing Modalities: Preliminary Issues and Qualifications

The designers of the MMRPs conceptualized a research programme with several interrelated assumptions regarding knowledge production in the developing world. Drawing from evolving discourses, the programmes are premised on the need to build and enhance the capacity of Southern researchers to understand and clarify issues that could enlighten short-, medium- and long-term processes of transformation in their societies. From the MMRP viewpoint, the complexity of the changes in post-colonial societies, bogged down by poverty, illiteracy, governance problems and structural economic difficulties, requires analytical capacities grounded in the prevailing conditions and particularities of the South. Clearly, for the MMRPs, building the capacity for development research could no longer be conceived simply in terms of training specialists in the basic (and universal) diagnostic tools and methods of academic disciplines. They could not be expected to apply these tools to research problems they have personally identified and pursue them without touching base with the research users and intended beneficiaries on the ground.

Proponents of the MMRPs argue that at the very least, the urgency of the need to address issues of underdevelopment entails focusing on research problems that will assist in overcoming particular obstacles to development. In view of the many logistical and time constraints they face, many Southern societies simply cannot afford the luxury of tackling purely academic research problems, even though such studies may be useful every now and then to gain insight into an issue. Rather, they need to seize all development opportunities before they are once again overwhelmed by changes taking place at the global level.

For each MMRP, the choice and handling of research problems demand understanding them from the perspective of multiple, and often conflicting interests and perspectives. Such a nuanced grasp of issues and problems, in turn, requires inputs from researchers in various disciplines and branches of knowledge. More importantly, it requires interactions with users – those who will utilize the findings to formulate development-oriented policies or actions, as well as those who will benefit from or suffer their consequences. Invaluable insights often lie undiscovered in the knowledge reservoir of those who live closest to the problems at hand.

Given these assumptions, the MMRPs are complex programmes. At the Leusden workshop, the 12 scholars focused on the features of the programmes, which in combination, the designers of MMRPs considered unique – long-term support for demand-driven, location-specific, multidisciplinary research for sustainable development, managed autonomously by Southern partners. In the course of the discussions, the scholars commented that they were familiar with other donor-initiated programmes that shared some of the assumptions and key features of the MMRPs.

Taking the existence of such other programmes for granted, the coordinators of the current study devoted their time in subsequent workshops to identifying the main features of the MMRPs. They were aware from the start that it would be impossible to find programmes that would be comparable in all respects to the MMRPs. Moreover, the MMRPs themselves showed considerable variations across countries, and empirical research was necessary to document the differences in orientation and implementation. To enable the project to address the aims of the study and to arrive at some meaningful comparisons, it was necessary for the country teams to identify programmes that at least shared the broad objectives of the MMRPs and some of their attributes. To that end, the research support situations in the MMRP countries had to be "mapped", from the perspective of those local situations rather than of the donors.

The mapping exercise revealed that most external agencies fund research and research institutions directly, according to their (the agencies') own priorities. Some of them fund government research institutions or universities; others support short-term action research lodged in NGOs. In view of this, the country teams applied a set of criteria, which varied slightly from one country study to the other, according to locally available options.[82] Some of the obvious variations in the programmes chosen for comparison were due to the attributes they emphasize and the local context. For instance, RED, the research division of BRAC, the largest NGO in Bangladesh, was chosen because it is similar to the PRPA, the Bangladesh MMRP, in terms of its focus on demand-driven research with direct implications for action. Similarly in Nicaragua, NITLAPÁN, a research-cum-development organization operating within the Universidad Centroamericana, was selected because it has consciously linked research to policy and actors on the ground, bridging macro- and micro-level analyses in their efforts. At the minimum, the selected comparators were externally funded programmes or institutions that aimed to build research capacity (of the most varied types), oriented toward the specific development needs of the country or locality concerned.

Although the inclusion of RED-BRAC and NITLAPÁN in the country studies yielded insights into capacity building for research on critical development problems that would inform action, they are not actually programmes. That is, they do not constitute a distinct set of activities related to research and capacity building that would not exist without donor support. These two comparators are research units or institutions. Donors support their routine activities – some may fund specific short- or long-term projects, others are more interested in consultancy work. But the fact is that the donors approach the institutions either to fund some activity that the institutions are currently developing, or to engage them in some activity in which the donors have an interest. This is also the case for the EPRC and MISR in Uganda. The fact that many donors assist these institutions makes it difficult to explore the impact of specific donor policies on capacity building. Thus, for purposes of this

report, these four cases are not systematically compared with the other programmes, although relevant insights gained from them are incorporated in appropriate sections and are noted accordingly.

Similarly, IDRC's support to four NGOs in Nicaragua for particular action-oriented social science research projects is excluded from the formal comparisons in this report because they represent neither a clear-cut programme nor a cooperation policy. Nonetheless, it is noteworthy that IDRC has achieved the reputation of pushing Nicaraguan researchers to work more closely with the grassroots when addressing environmental issues, participatory land use planning and local capacity building. The insights from these projects have contributed to the overall reflections in this report.

Another overriding concern during the mapping exercise was to identify programmes that are receiving long-term donor support, because research capacity building is not a once-and-for-all event but results from a cumulative process of learning. Hence, the selected programmes ought to be multi-year or multi-annual with promise of support for different phases. Table 4 shows that almost all programmes enjoy long-term donor support. Two comparators, however, the UNDP programme in Kerala, India and the IDRC/CIDA-supported VISED in Vietnam were short-lived. In the two years of its existence, the UNDP programme helped to mainstream social development issues in India's agenda, but it was aborted following the untimely demise of its director. On the other hand, the VISED, which was positively assessed for enhancing the skills of researchers, completed a three-year phase and evolved into a programme with a different name (Vietnam Economic and Environmental Management) and funding source. Despite the short duration of these programmes, they are included in the comparisons in this report because of lessons that can be drawn from the modalities they represent.

As far as this report is concerned, the notion of long-term donor support refers to the duration of a specific agreement between the foreign donor and the local recipient organization, which reflects the type of capacity building being aimed for and facets of the donor's cooperation policy. The duration has nothing to do with the length of funding of specific projects within programmes.

Examining the description of the activities funded by each programme, the distinction between long- and short-term funding is less clear-cut. Donor support for the MMRPs, for example, is guaranteed for at least four years at a time (all of the MMRPs have already negotiated a second phase) but the projects they support are short-term. Some recipients commented that the projects are often too short, leaving no time for a thorough reflection and review of the literature on the issue. Thus, what could have been a comprehensive survey has to be cut short, and reports on the results of research projects that have not had time to mature have to be hastily writ-

ten up (with adverse effects on their quality). Most seriously, they permit only short-term on-the-job research training for young researchers.

Of course there are good reasons for the choice of time frame. For one, the demand-driven approach to research adopted by the MMRPs gives preference for short-term research projects because it is difficult to maintain the interest of stakeholders in projects with long gestation periods. Moreover, there is widespread interest in providing research opportunities to as many interested parties as possible, so that long-term projects would certainly reduce the number of grantees considerably.[83]

Table 4. Selected programmes by research areas, capacity goals and beneficiaries.

AFRICA		
Programme	**Field of knowledge/research area**	**Capacity goals/ research beneficiaries**
TANZANIA		
REPOA	Poverty alleviation • environment • gender • public policy • sociocultural determinants • technology development	Create a strong research community that will contribute studies on poverty to enlighten national development through its influence in public policy decision making. • Develop capacity for policy research • Develop potential researchers
IDS/WSG	Gender studies	Create community of women researchers / university women
WRDP	Gender studies	Create community of women researchers and staff / university women
ENRECA	Social sciences • gender • agrarian reform • farming systems and resources management	Conduct formal training and enhance the research experiences of researchers of participating university institutes
UGANDA		
NURRU	• household poverty and welfare • development conditions and policies	Strengthen member institutions – train researchers in the member institutions to solve problems using research results

ASIA		
Programme	**Field of knowledge/research area**	**Capacity goals/ research beneficiaries**
BANGLADESH		
PRPA	Development research (poverty alleviation)	Create a strong research community that will contribute studies on poverty to enlighten national development through its influence in public policy decision making. Contribute long-term poverty alleviation policy for Bangladesh
MAP	Poverty monitoring system, poverty alleviation	Strengthen institution and conduct research training in the field of social indicators, monitoring systems and databases for policy decision
INDIA		
KRPLLD	Environment, gender and poverty alleviation within a framework of local decentralization	Create a research culture locally, train researchers, motivate non-researchers Contribute to local development planning and policies in Kerala.
APNLBP	Biotechnology and small-scale farming systems	Train of researchers to deal with rural development problems; develop and transfer biotechnology
UNDP	Electrical engineering, chemical engineering, plant science, environment, geosciences	Train young and new researchers, attract senior researchers to development, action-research
VIETNAM		
VNRP	Sustainable rural development research (integrating gender and environmental issues)	Create a strong research community that will contribute studies on poverty to enlighten national development through its influence in public policy decision making.
FSRP (SAREC)	Integrated farming systems Agricultural, livestock, forestry, aquaculture	Conduct training of researchers (Masters and PhDs), strengthen institutions; publish scientific output
VISED	Economics, environment, S&T management, legislative reform	Conduct training, strengthen institution for policymaking, project management and networking

LATIN AMERICA		
Programme	**Field of knowledge/research area**	**Capacity goals/ research beneficiaries**
BOLIVIA		
PIEB	Social sciences • actors and social relations in daily life • productive transformation, social integration and sustainable development • democratization and state reform • cultural transformation and community studies	Create a strong research community (special focus on training young researchers in the process of doing research) that will contribute studies to enlighten national (subsequent focus on regional) development through their influence on public policy decision making.
FTPP	Community forestry (environmental management – social sciences)	Develop researchers and train relevant publics in participatory, community-based environmental management/communities in forested areas
PIRN	Indigenous technical knowledge	Develop researchers and train relevant publics in participatory recovery of indigenous knowledge/indigenous peoples in Bolivia
SAREC	Phase I: social sciences • democracy, state and political systems • environment • urban and local development • public policy and development Phase II: social sciences and technology	Develop researchers and create networks for local development (e.g. Network for Action and Research for Local Development, Network for Sustainable Development, Network for Urban Development) Conduct formal training (MSc and PhD), strengthen institutions, consolidate post-graduate programmes; publish scientific output; establish linkages with Swedish researchers
PROEIB	Interlinguistic intercultural education	Develop competent teachers and researchers through bilingual Masters courses/indigenous peoples
CEPLAG	Social sciences/natural sciences • health • hydraulics • geotechnology • soils	Develop researchers who will conduct studies for regional planning and management/region Conduct formal training, institutional strengthen institution, consolidate postgraduate programmes

LATIN AMERICA		
Programme	**Field of knowledge/research area**	**Capacity goals/ research beneficiaries**
NICARAGUA		
ADESO	Development research	Create a sense in the community of the relevance of research for development – training new researchers in the region to solve problems using research results – community participation in agenda setting
SAREC	• electrical engineering, • chemical engineering, • plant science • environment/geosciences	Develop research on topics useful to the region (e.g. causes of groundwater pollution) in the course of formal training. Conduct formal training of researchers (MSc and PhDs), strengthen institutions, consolidate postgraduate programmes; publish scientific output. Establish linkages with Swedish researchers.
SUDESCA	Innovation economics and technological changes	Strengthen academic research, qualify university teachers, create a PhD programme

Depending on the defining variables, there are different ways of constructing modalities of donor-initiated research collaboration out of the programmes studied. The institutional arrangements employed, the research capacities being developed, linkages with other researchers and stakeholders within the country, and relations with donor agencies and Southern partners define general modes of cooperation that may differ in terms of any one of the variables. Variations observed within each modality usually result from differences in the practices of funding agencies, the conditions in the country or locality, the institutions in which the programmes are lodged and the core people implementing the research capacity-building strategy.

The following sections construct and compare various modalities, each section elaborating on the constructed modalities before it.

3.2 Institutional Arrangements and Administrative Mechanisms: Autonomy, Accountability and Sustainability

Two modalities emerge in terms of institutional arrangements for capacity building. Mode 1 consists of programmes linked to and administered by existing academic institutions, i.e. universities or independent research centres. Except for the WRDP in Tanzania, all of the programmes funded by SAREC and DANIDA, as well as those supported by GTZ and Belgium fall under Mode I (Table 5). In all of these cases, donor-supported activities are clearly distinguishable from the other activities c arried out by the universities or research institutes, and the local coordinators are based in the institutions involved.

Table 5 *Institutional arrangements of the programmes included in the study.*

Institutional arrangements/ Institutional host	Mode I *Linked to and administered by a university or research centre*	Mode II *Lodged in but independent of the host institution*
University	SAREC: • Vietnam • Bolivia (new phase) • Nicaragua • IDS/WSG, Tanzania DANIDA: • SUDESCA, Nicaragua • ENRECA, Tanzania GTZ: • PROEIB, Bolivia *Belgian-Flemish Cooperation Agency:* • The CEPLAG, Bolivia	SAREC: • WRDP, Tanzania
Research centre outside a university	SAREC: • Bolivia (previous phase with CERES and CEBEM)	DGIS MMRP: • KRPLLD, India DGIS: • APNLBP, India UNDP: • UNDP, India FAO: • FTPP, Bolivia DFID: • PIRN, CIDOB, Bolivia
Government agency		DGIS MMRP: • VNRP, Vietnam CIDA/IDRC: • VISED, Vietnam CIDA/IDRC: • MAP, Bangladesh
Non-governmental organization		DGIS MMRP: • PRPA, Bangladesh
Independent/ research network		DGIS MMRPs: • ADESO, Nicaragua • REPOA, Tanzania • NURRU, Uganda • PIEB, Bolivia

The SIDA/SAREC-funded FSRP in Vietnam involves three agricultural universities in different regions of the country and one research institute. The Vietnamese scientists who initiated the programme, SAREC officers and two resident foreign consultants formulate its research agenda. Coordinators in the collaborating institutions and researchers, however, contribute to the process and decide on projects to be funded or the amount to be allocated for each project.

Like the FSRP, Nicaraguans initiated most of the SAREC cooperation programmes in the four universities covered. The initiators and Nicaraguan coordinators of the programmes claim to have a high degree of autonomy in the implementation and management of the programmes. They select the research subjects, the faculty members who are to receive fellowship grants, and request the purchase of equipment and materials. In all the Nicaraguan programmes studied, the researchers claim not to have experienced any interference from their Swedish colleagues, or from SAREC officers regarding programme operations.

The SIDA/SAREC-funded programme in Bolivia is slightly different from those in Vietnam and Nicaragua. First, the donor agency's support was initially channelled to CERES and CEBEM, two independent research centres working exclusively in the social sciences. A second difference is that funding for research and training in the areas of environmental problems, demographic studies, local democracy and urban administration aimed to develop trans-disciplinary perspectives and to balance the capacity for theoretical social science work with social action. The newest phase of the SIDA/SAREC cooperation in the social sciences in two universities will build on the capacities developed in the institutes they supported not only in terms of carrying out research but also in research management. Researchers from CEBEM and CERES, who participated in an earlier phase of the SIDA/SAREC Bolivian programme, will facilitate the links between the faculty in the two universities and relevant centres of capacity building. These researchers will also serve as teachers and tutors of PhD and MSc students.

All the university-based SIDA/SAREC-funded programmes support the formal training of researchers (MSc and PhD) in local institutions. To prevent inbreeding and brain drain, the more technical programmes in Vietnam and Nicaragua devised sandwich courses in which postgraduate students study part of the time at a Swedish university. In a slightly revised version of this model, the social sciences programme under negotiation in Bolivia will send teachers enrolled in the sandwich Masters and PhD programmes to reputable universities within Latin America. Having funded the activities of the Latin American Federation of Social Science Organizations, SIDA/SAREC would be in a position to facilitate this new form of regional exchange.

The mode of cooperation between SIDA/SAREC and the Women's Studies Group of the Institute of Development Studies in Tanzania deviates from the three models in

Latin America and Asia. SIDA/SAREC is the main source of funding for the IDS/WSG, and supports research on a project-by-project basis. With the proliferation of gender groups in the university, including the WRDP, SIDA/SAREC proposed the creation of a Gender Management Committee (GMC), composed of representatives of the gender groups, to review proposals for small grants and to select the most eligible for submission to SIDA/SAREC. Ultimately, the decision on which projects will be funded rests with SIDA/SAREC.

The DANIDA-supported programmes are quite similar to those of SIDA/SAREC. In Nicaragua, the design of SUDESCA, which hopes to enhance the competitiveness of the national economy within the coverage of the project and to identify economic alternatives for small communities, is similar to those of the SIDA/SAREC programmes. Although SUDESCA is smaller in scope and scale, it represents a broader cooperation effort involving three research institutions in Central America. It supports researchers to attend classes in Denmark and to conduct research in Nicaragua.

ENRECA in Tanzania is a partnership between a Danish research centre and three institutes at the University of Dar es Salaam. Like SIDA/SAREC and SUDESCA, it features a sandwich thesis research system, whereby Tanzanian researchers gather data or conduct field research in Tanzania and analyse and write up their findings abroad. In addition, the programme issues open calls for proposals and supports small projects conducted by young researchers. Responsibility for the day-to-day operations of the programme lies individually and collectively with the coordinators of the institutes, who form a joint research committee that decides on funding and budgets.

Both SIDA/SAREC and DANIDA have delegated the management of the programmes to local partner institutions, although in some of them resident consultants provide technical support. The coordinators of SIDA/SAREC's and DANIDA's programmes in the local universities covered by the study claim to enjoy a high degree of autonomy in the management of their programmes. They pointed out, however, that a series of important decisions was previously made by the donors, such as which fields of knowledge were to be given priority, in some cases at the initiative of or with inputs from local researchers. Nevertheless, within these general fields, the resource persons interviewed for this study agreed that both agencies leave the identification and selection of research topics entirely in the hands of the local partners.

Compared with the DANIDA and SIDA/SAREC system of programme administration, the Belgian-funded CEPLAG employs a permanent representative of the agency to jointly manage the budget and programme activities (research and fellowships for Masters degrees) together with a Bolivian coordinator. In terms of the research

agenda, the funding agency is involved in setting priorities, although Bolivians can negotiate research themes selected through participatory processes.

Apart from administration, the Belgium–Flemish cooperation programme also differs from the SIDA/SAREC and DANIDA programmes included in this study in terms of the nature of cooperation with Northern researchers. The projects carried out through the Universidad Mayor de San Simón in Cochabamba, Bolivia, include four focal areas: health and tropical pathology, hydraulics, geotechnology; and soils and materials. The programme ensures the participation of Belgian academics as individual researchers in line with their own interests. The practice has been that projects designed in Bolivia are selected for presentation to the Flemish Inter-University Council, which seeks professors interested in developing and undertaking the projects with Bolivian researchers. To some extent, support for the projects depends on whether Belgian academics wish to participate. Interestingly, while SIDA/SAREC and DANIDA send Swedish or Danish scientists for technical backstopping, these were usually coursed institutionally. On the other hand, CEPLAG, the new Belgium–Flemish cooperation programme included in this study, departs from its usual practice, in that it uses participatory processes to identify research themes, and even funds projects that do not succeed in attracting the interest of Belgian researchers.

The final university-based programme under Mode I is the GTZ-supported Bilingual Intercultural Education Programme (PROEIB) in the Andean region. At the request of the Bolivian Ministry of Education, Culture and Sports, GTZ supplies resources for the institutional infrastructure development. Four foreign PhD professors participate in the MSc degree course in interlinguistic intercultural education, which Bolivia administers and to which Chile, Colombia, Ecuador and Peru send students for training. The programme documents identify research as a fundamental activity, but in practice, it is integrated into the training course and depends completely on the personal initiatives of the Bolivian professors.

In contrast with the university-based programmes, all the DGIS-funded programmes (the MMRPs and APNLBP) and a few other programmes (the IDRC-supported VISED and MAP programmes, FTPP and PIRN) have bypassed established institutional structures and have formed their own institutional arrangements. Most of them are located in existing research centres,[84] but they are in principle independent of their host institutions. Although the MMRPs have sought independence, this has not been achieved completely in Bangladesh, Kerala and Vietnam. In some cases, the programme organizers found it difficult to find a host institution that would allow complete independence, possibly out of concern for its own reputation. To operate independently, these programmes need to acquire a range of management, organizational and training/capacity building skills and to establish their own systems of rules and procedures.

The DGIS-supported programmes maintain their autonomy from their hosts through agreements that define programme parameters, the structures of governance (including independent steering committees), mechanisms of agenda setting and project selection, as well as research monitoring and evaluation processes. For instance, the MMRPs and the APNLBP have multi-stakeholder steering committees with members of known probity and a secretariat in charge of day-to-day programme management. Similar local bodies, referred to as steering committees, executive committees or advisory committees govern the other programmes and coordinate with the funding agency.

It is important to note, however, that while an independent system of governance is a prerequisite for autonomy from the host institution, it is not necessarily associated with autonomy from the donor. Interestingly, it is only in the DGIS-supported programmes under Mode II that the donor is not represented in the governing bodies. This observation is consistent with the DGIS policy of granting full autonomy to Southern partners in the determination of research directions and funding allocations. In contrast, a foreign programme adviser and representative of the funding agency sit in the two IDRC programmes in Asia, VISED and MAP. The Bolivian Country Report observes that in some cases the donors participate in administrative and executive committees or in some aspects of the management of FTPP and PIRN. The case of the UNDP programme is unique. Like the MMRPs and the APNLBP, it had no donor representation in its steering committee, but a representative of the Harvard Center for Population and Development Studies sat on the steering committee, presumably to make substantive contributions, since the Center had no power over funds.

Two points on the DGIS-supported programmes in which the donor is not represented on any governing board are worth mentioning. By way of background, the autonomy of the MMRPs and the APBLNP is assured by the existence of multi-stakeholder steering committees (SCs) and complementary bodies such as programme advisory committees (PACs). Ironically, the establishment of steering committees composed of researchers and representatives of government and grassroots organizations was an absolute DGIS requirement to ensure autonomy. On the basis of inputs from various sectors, the SCs, assisted by PACs (in programmes where they exist) are expected to establish research thrusts in response to their assessment of the country or locality's development needs. For some MMRPs, which are independent of any institutional base, the thrusts established by the SCs are further confirmed by a general assembly of organizations constituting the programme.

Regarding the composition of the SCs and PACs, the MMRPs view multi-stakeholder representation in the policymaking and advisory bodies as crucial for achieving an autonomous direction-setting process that is attuned to the conditions in developing societies. But ensuring representation in the highest decision-making bodies has

been easier to achieve in some programmes than in others. In contrast with the APNLBP, which has worked well with a biotechnology committee of scientists, representatives of relevant government agencies and NGOs, the MMRPs have had varying levels of success in achieving full representation. In some, academic interests determine the research thrusts and policies, whereas in others grassroots organizations have veto powers over SC decisions.

Apart from non-academic representation, it is assumed that the SCs will be effective in providing appropriate policy directions and management oversight. The SCs are therefore crucial in ensuring that the MMRPs benefit from donor autonomy. In practice, however, some SCs have found it difficult to convene meetings because of the busy schedules of their members. This suggests that much of the organizational and substantive work that has accounted for the relative success in the management of some programmes has fallen on particular committed members of the SC or on the Secretariat. As in the other donor-initiated research programmes included in this study, a high level of commitment and sense of purpose among critical actors in the local leadership are indispensable for ensuring the success and sustainability of the programme. This becomes even more imperative when the full responsibility for an iterative research programme rests on the partners in the South.

Apart from systems of governance involving highly respected members of society, a number of other factors have prevented the host institutions from overturning programme decisions on priorities or replacing them with their own. These include the specificity of programme frameworks, the programme's participation in broader international networks, or the novelty of its research agenda. MAP, FTPP and VISED are cases in point. The paradigmatic nature of the underlying theoretical framework of MAP's efforts to monitor poverty in Bangladesh, the specificity of its methodology, and the fact that it is a part of an IDRC-funded cross-country programme, protect its autonomy from its host, which is a regional body for Asia and the Pacific. Similarly, the fact that FTPP is part of an international programme supported by the FAO's multi-donor fiduciary funds ensures its autonomy from CERES. In Vietnam, on the other hand, the novelty of the neo-liberal discourse in a country shifting from a command to a market economy helped to ensure VISED's autonomy within the Ministry of Science, Technology and Environment.

Although the programmes under Mode II have built-in mechanisms to ensure autonomy from their hosts, autonomy constitutes only half of the picture. The other half consists of the benefits from the association of the programmes with their respective institutes. In general, the credibility of the institutions with which they are affiliated has contributed to the acceptance of the programmes under Mode II. For instance, the position of the Institute of Public Enterprises in India as an outsider to agricultural research institutions has made it an impartial and neutral player, and has made the APNLPB more acceptable to the research organizations and the wider

community. In the case of the KRPLLD, its location at the Centre for Development Studies, which is a staunch advocate of decentralization and an academic institution with a reputation for independence, has served the programme well. Ironically for Vietnam, the location of VNRP within MOSTE provides legitimacy for the programme and its acceptance by the state. This, in turn, has helped it enjoy its current relative autonomy from the bureaucracy. FTPP's association with CERES, which has considerable experience in managing natural resources and analyzing environmental impacts in Bolivia, has boosted its identity, while PRPA's association with the Grameen Trust has augured well for its reputation in circles working on poverty alleviation in Bangladesh.

It is, nevertheless, important to point out that the programmes need to balance the gains from their association with strong and reputable institutions and their autonomy, despite the existence of formal mechanisms to ensure the latter. Autonomy is not permanently assured. The line between autonomy and incorporation into a host organization's agenda or operations becomes tenuous if a programme's leadership weakens, or if mechanisms for independent decision making or financial administration are not fully institutionalized. This is why informants in Bangladesh expressed concern over the integration of the PRPA into the agenda of the Grameen Trust when the leadership post in the PRPA Secretariat was vacated. In this connection, they were anxious that the programme would not be able to maintain an identity independent of the host institution. Moreover, they were worried about the effects of the application of the NGO's administrative procedures and salary scales to programme operations on the PRPA's long-term objective, which is to provide immediate research-enlightened solutions to the processes of change (e.g. poverty alleviation). The fact that the Grameen Trust appoints the PRPA steering committee, chair and programme director has further added to the fears for the institutional autonomy of the programme.

Of the Mode II programmes, those that are not lodged in any institution do not have to weigh the costs (to autonomy) and benefits of institutional affiliation. They are independent. But for the four MMRPs in this category – ADESO, NURRU, PIEB and REPOA – full autonomy has meant establishing an identity without any help from reputable institutions. Of these four, PIEB and REPOA have achieved greater success in carving a niche for themselves nationally in Bolivia and Tanzania. ADESO has become an institution in the minds of a local rather than a national public, although it is currently most concerned with convincing local institutions of the need for research in their search for solutions to local problems. NURRU started off with a secretariat at the Centre for Basic Research, a private foundation, but chose to form its own separate foundation in 1998. It has lagged behind the others in establishing a consistent identity within Uganda because of management problems, although these have been resolved by a change in leadership.

Apart from the greater challenge of identity building and projection, full autonomy also entails greater responsibility and accountability. Autonomous programmes located within existing institutions tend, wittingly or unwittingly, to take not only their respective publics or stakeholders into account, but also the publics or community of the institution that hosts them. Usually, these publics overlap since the programme and the host institution share domain assumptions. The pressures for administrative accountability, and more importantly, for the moral responsibility to achieve a *raison d'être* emanate as well from the wider community of the institutional host. The more aware they are of their responsibility to a wider community, in particular the people with whom they work, the more vigilant programmes become with regard to their direction and performance. For instance, the fact that KRPLLD is located in CDS would make it unthinkable for this MMRP to adopt the thrust of consultancy work that is usual in New Delhi, or to mismanage finances. After all, the grassroots commitment of CDS resonates with and reinforces the same commitment in KRPLLD.

A significant community may take the form of the host institution, a research community, concrete local communities, or the imagined community of development workers in a particular region or country. In the absence of such a community, full autonomy puts the burden of establishing ties with a relevant wider group on the programme. Among the four programmes without institutional hosts, REPOA, PIEB and ADESO established ties in greater measure with their significant communities and have been more accountable to them than NURRU has been. In the course of defining its niche, REPOA has found itself working with the wider community of policymakers, international researchers and consultants on the one hand, and development workers and grassroots researchers on the other. While it is now in the process of determining the identity of the poverty research institution it is building, it has had no problems with administrative accountability.

In Bolivia, PIEB's significant community was confined in the initial phase of the programme's evolution to the social science community. The community, however, widened to include local community leaders and representatives of the universities, research centres and NGOs, which the programme has consulted and through which it has issued calls for proposals. This enlarged community has helped PIEB to redefine its focus at different points in its development, and to maintain its growing reputation for quality research in Bolivia. ADESO, on the other hand, draws on the community of grassroots organizations that has been significant in Nicaragua. It is this community that has kept ADESO on the track of participatory research and governance. In such a context, it has attained a high level of transparency and accountability. In the case of NURRU, the episode of mismanagement occurred because of the absence of a clear community in Uganda to which the leadership was accountable, apart from DGIS. It was not accountable to a university, to a host research centre, or to a real or imagined development community.

In terms of institutional autonomy, the MMRPs that are not lodged in any centre or NGO enjoy full independence, even from the funding agency. The rest of the programmes under Mode II have the flexibility and independence from the centres that host them except perhaps for PRPA, whose long-term development may be subsumed substantively or administratively because of the overwhelming influence of its host, the Grameen Trust. In contrast, programmes under Mode I that involve institutions bound by university rules themselves tend to be encumbered by regulations and constraints and are more vulnerable to academic politics.

The issue of institutional autonomy has been linked to the question of sustainability. From one point of view, programmes based in institutions like universities, research centres, government agencies or NGOs have greater promise of sustainability because both the networks of researchers they have produced and the institution they are part of would work for their survival and continuation. From another perspective, however, programmes that are not bogged down by the baggage of organizational and academic responsibilities could have greater opportunities to establish a research track record that would ensure their attractiveness to funding agencies. Among the MMRPs, REPOA would seem to be on the path to sustainability as an institution. With its track record and the connections it has fostered, REPOA has become attractive to a number of funding agencies and is quite capable of obtaining contracts from a plurality of donors. Since donors tend to cluster around particular types of studies such as policy research, however, the direction of the programme, caught as it is now between a macro-oriented policy research culture and a location-specific culture of grassroots poverty research, may be profoundly shaped by the practicalities of its survival as an organization.

The concern of programmes like the FTPP, which have established a track record in community-based environmental research, however, is the seeming absence of sustained funding support for ground-level work. In light of the changes in FAO funding, in order to survive as a programme, the FTPP may have to sacrifice its autonomy and link up with existing government agencies. Most of the MMRPs share the same anxiety. In addition to fears about the availability of support for location-specific development research, they also worry about losing the autonomy that has enhanced their learning. Will the level of autonomy of the programmes or the programmes themselves, for example, be maintained when DGIS withdraws its financial support? Will other donors permit the same level of self-governance of local partners?

When discussing the issue of sustainability, the question that arises – which this report cannot adequately address – is what exactly is being sustained? Is it the programme as an organization? Is it the model of research management the programme operationalizes and the underlying philosophical framework of development and knowledge production? Is it the policy of facilitating the creation a critical

mass of development researchers who can shift gear as they produce knowledge to improve the conditions of the poor, because of their autonomy to move resources and researchers at different levels, but most especially on the ground?

As a social experiment, the MMRPs advance a model of research collaboration and management that has worked in particular countries. In the case of Vietnam, the VNRP model of research management may even be adopted by the Ministry of Science, Technology and Environment for its international research cooperation programmes.

But to look at the MMRPs simply as models of research management is to miss the value of the philosophy they are espousing and the mode of knowledge production they are beginning to articulate. While the sustainability of particular programmes may be at stake, the hope is that the ideas behind the programmes will not only be sustained but also developed through networks of researchers who have been touched by them. In the end, the choice is between developing a research movement or an organization.

Although there are no easy answers to the questions regarding sustainability, it is instructive to end this section with a reflection from the ADESO experience, as described in the Nicaraguan Country Report:

> "From the moment they were convened, the representatives of the local community were given considerable power to make decisions about the entire programme: from its administrative organization, including planning and budget, to its research agenda, project selection criteria and quality evaluation.
> This form of academic and administrative autonomy had no precedent in the cooperation programmes in the country, and was even the subject of some astonishment among the local community. According to some interviewees, in the early discussions about the potential MMRP, there was even some measure of suspicion about the ulterior motives of the Dutch representatives, because they did not explain themselves and refused to make demands about the implementation of the programme. Many local participants thought that they were being tested, although they were ignorant as to what they were being tested on.
> Even today, some members of ADESO have difficulty in comprehending the autonomy bestowed upon them by the Dutch. A few interviewees believed that the Dutch ought to have outlined clearer objectives for the programme, although such a comment may simply reveal that the habit of working in accordance with the priorities set by the donor agency is deeply rooted among the recipients of cooperation. It is also important to note that this complaint was raised in relation to the difficulties in establishing ADESO's

research agenda and of defining criteria for the selection of research proposals. Due to the difficulties in working in an association of more than 30 organizations, some members felt that an arbiter was needed to help resolve disputes. The latter, in this case, was identified by some as the foreign donor.

The internal disputes have arisen from the diverse interests of the organizations that make up ADESO's general assembly. Few of them have any experience in carrying out research or in using research results and, therefore, they have difficulty in understanding and managing such a programme. There is, however, a positive side to this diversity. Because ADESO's decision structure ensures that all member organizations are represented in the general assembly, the divergence becomes explicit and a healthy negotiation of interests takes place. In the course of this process, ADESO is building up its identity, refining its mission, and is exercising its autonomy while developing a measure of sustainability. This is one way whereby a programme can achieve sustainability. Thus, even though ADESO is financially dependent on Dutch resources and its autonomy was, at first, a concession of the donor, that autonomy is now being seized upon by the local member organizations, and is becoming part of their principles and modus operandi. The members are beginning to appreciate the meaning of research for local development, the importance of being able to articulate their own demands and needs for research, and the need for procedures to ensure that the research process will produce results of quality and relevance.

The objective of the DGIS policy has never been simply to implement an efficient research programme in the short term, but rather to invest in building up a capacity to generate, manage and carry out research programmes that are meaningful for local development. In this sense, the process of learning, which is undoubtedly taking place among the members, directors and employees of ADESO, the programme is meeting its objectives. As this know-how takes root, it is very likely that sustainability will be achieved. Even if ADESO does not continue to exist as a programme in the long run, the interviewees made it clear that its policy assumptions – the role of research in development, the local ownership of research design, implementation and management – have been incorporated into the local people's mental repertoire. Thus the sustainability of the policy is assured, if not of the institution."

3.3 Building Capacity for Development-Oriented Research: Relevance, Location Specificity and Multidisciplinarity

3.3.1 Discursive context

Regardless of institutional arrangements, the donor-initiated programmes included in the study have been shaped to varying degrees by the changes in development discourses outlined in Section 1.2. Without exception, these programmes aim to build the capacity for research that can address the development problems in the countries concerned. Their documents and specific practices reveal that none of them adhere to the idea of knowledge for its own sake despite the academic moorings of the programmes under Mode I.

This observation is not surprising. After pouring resources into the disciplinary training of Southern scholars in Northern universities from 1946 to the 1970s, funding agencies shifted their support to research that is intimately linked to development goals. This shift affected research programmes under bilateral or multilateral development cooperation, as well as those funded by private foundations (e.g. the Ford Foundation).

A confluence of factors facilitated the shift in donor training priorities. As early as the late 1950s, social scientists in the developing world pointed to the wide gap between the dominant Western perspectives and theories they learned in the North and imparted in the Southern universities where they taught, and the complex realities confronting postcolonial societies. In response to the lack of congruence between theory and actual experience, Southern academics in countries that were not distracted by wars consciously expended efforts to "indigenize" their perspectives and methodologies. Indigenization took a variety of meanings and forms at the time. It included, on the one hand, the search for indigenous concepts and perspectives, and on the other, the grounding or adaptation of applicable Western perspectives and models. Together with the worldwide protest movements in the 1970s, which focused on structural development issues and immersion with the masses, the indigenization movement opened up social science communities in the South to problem-oriented, multidisciplinary development research that would respect the views of those at the grassroots. The availability of funding support in this direction merely nurtured the seeds of change within academic practice.

Indigenization did not take root in the natural sciences because of the paradigmatic nature of the disciplines. But even as research institutes fed into the larger corpus of universal scientific works, the question of relevance impelled them to undertake location-specific studies that would help to resolve real problems. In the context of Southern agrarian economies, agricultural scientists were under more pressure than their counterparts in the other basic disciplines to link research to the act of feeding the poor majority in their midst. Given the nature of their field, agriculturists were

also more open to multidisciplinary links among the relevant natural sciences (e.g. plant breeding and more recently biotechnology) in search of higher productivity. Peasant resistance to scientific agricultural innovations further pushed natural scientists to widen their research networks and link up with social scientists as early as the 1970s. By the mid-1980s, interactions between agriculturists and social scientists had become more significant. Thus, by the late 1980s, the frameworks of an increasing number of agriculturists had slowly shifted away from the view of peasants as irrational and ignorant, to one in which they were a source of scientific inputs.

At the international level, changing paradigms contributed to the policy of support for development-related research. To a significant extent, donor agencies became harbingers of up-and-coming development policies and discourses. By making funds available to nurture proponents of emergent types of research or to stimulate interest among traditional researchers, donors have helped to mainstream alternative development perspectives and participatory research paradigms, which Southern intellectuals and scholars have helped to develop, in universities and research institutes. Through funding mechanisms, donors have also pushed researchers steeped in academic concerns or in theoretical critiques to forge links with external agencies, including grassroots organizations.

Although donor agencies have facilitated the exposure of Southern researchers to changing discourses, and have themselves contributed to the debates, the motivation and stimulus among researchers in developing societies to undertake new modes of research do not necessarily derive from donors. As noted previously, the seeds of change had begun to sprout in the South at the point of interface with the donors. Furthermore, Southern actors have themselves contributed to the complex process of shaping international discourses.

As frameworks with real consequences for interpreting and operationalizing development, international discourses are outcomes of struggles, debates and the intense advocacies of sectors from different countries and networks that contend in the international arena. Various UN-sponsored conferences, such as the 1992 Rio de Janeiro Conference on Environment and Development, the 1995 Conference in Beijing on gender, and the 1995 Copenhagen Conference on Human Development, served as important venues for the struggles. The agreements reached in such conferences have come to bind nations in the North and, with them, the donor agencies that incorporate new concerns into the terms of their grants (e.g. gender and environmental concerns in funding for development activities and research).[85] But apart from compliance with international agreements, new views from donor agencies that affect research in the South often result from close interactions and intensive discussions between individuals in the agency and their Southern colleagues.

Thus far, this report has highlighted the significant contributions of evolving international discourses to changes in the orientation of donor-initiated research capacity building programmes in the South. These contributions range from direct training of Southern researchers in Northern institutions, to collaborative research where end users participate in the process of identifying and conceptualizing problems. The observed changes in discourses that enlighten development work, however, ought to be qualified by their operationalization in practice.

Over the years, development perspectives have shifted from modernization theory and structuralist political economic analysis to participatory development and good governance frameworks. The "paradigmatic assumptions" underlying earlier perspectives nevertheless continue to inform the contemporary practices of the development community.[86] Kaplan identifies several assumptions held by development agencies to which even those who subscribe to participatory views unconsciously adhere. They may be summarized as follows.

First and foremost, development can be engineered through interventions that facilitate the delivery of resources to poor beneficiaries. The interventions presuppose a rational understanding of their conditions. An emphasis on understanding, in turn, puts a high premium on the transfer of technical knowledge and expertise through training of development subjects, who are seen to be on the receiving end of a one-way flow of technical inputs. Assuming a direct line between inputs and outputs, the ultimate targets of development are expected to develop commensurately with the inputs of third parties that are presumably more developed. Following this line of reasoning, development programmes and projects are evaluated in terms of stipulated outputs given specific inputs.

The recent incorporation of participatory frameworks into international discourses has tempered the conventional banking mode of development intervention, in which technically superior and resource-rich external agencies provide inputs for specific projects undertaken in the developing world by groups working on behalf of recipients of development assistance. The participation of intended beneficiaries of development in the search for "bottom-up" solutions has come to be accepted as vital to the dominant development paradigm. Nevertheless, Kaplan asserts that participation within this paradigm has tended to be seen as a means to achieve development goals rather than as an end in itself.

Counterposing a different development reading, Kaplan argues that the whole point of development is to enable people, as its subjects, to participate in the governance of their own lives. Thus, participation is an end, rather than simply a means in a process that exists independently of third parties. It flows out of the development experiences of those seeking to develop. Moreover, development is nonlinear, unpredictable and, occasionally, anarchic. Particular interventions produce myriad out-

comes, both expected and unplanned, depending "upon a complicated array of factors including the precise relationship between inputs and the development processes being intervened upon".[87] This happens because targeted development beneficiaries are not "passive recipients of intervention but active participants who process information and strategize in their dealings with local actors as well as with outside institutions and personnel".[88]

Seen in this light, the direction of change and its significance cannot be imposed from the outside. Nor can it be explained by a structural logic. This suggests that development is open-ended since effective interventions open things up rather than close them down. These assumptions suggest that the evaluation of development interventions in the form of projects and programmes for Kaplan ought to take place "against the background of the specific development process which has been intervened into, not against the ends stipulated in a project document".[89]

What do the alternative domain assumptions imply for capacity building in general, and for research capacity building in particular? Since development agents do not deliver development but intervene in existing processes, understanding the location of individuals, organizations and communities on their own development paths constitutes the most important challenge for development workers and researchers. They are required to enhance their openness and ability to observe acutely, and to suspending their preconceptions in order to be able to render an appropriate development reading.[90] Theirs is the catalytic function and facilitative role of listeners imbued with the commitment to enhance the self-consciousness of the marginalized so that they can develop their capacities and transform their environment through their own praxis.[91] With regards to research, participatory action research (PAR) approaches with their underlying theoretical standpoint are conceptually "in sync" with the alternative domain assumptions outlined above.[92] Thus, building the capacity for PAR could potentially bridge the assumptions of an inchoate alternative perspective and development practice.

On the whole, there is a lack of congruence between development perspectives (i.e. the increasingly participatory frameworks embedded in the changing discourses of international agencies and donors and their evolving definition of development as empowerment) and the dominant paradigmatic assumptions that inform development practice. This reality is even more obviously reflected in the gap between the participatory/empowerment/democratization goals in international development discourses and the research capacities being built. If conceptual congruence were the only consideration, then one would expect that building the capacity for applied research, particularly for PAR, would be a paramount goal to which academic research training (in disciplinary or multidisciplinary fields) would contribute. But a cursory review of the capacity building programmes in developing countries reflects

an emphasis on developing other skills, including training in traditional disciplinary scientific research.

The lack of congruence reflects the complexity of development realities and the differences in the interests, missions, visions and thrusts of development agents whose discourses may converge at very high levels of abstraction but diverge on substantial theoretical and operational issues. To illustrate, most research donors will agree on the vital role of grassroots participation in the development process; their documents usually espouse a participatory framework in one form or the other. They may differ implicitly, however, in their views of the type of research capacity required by participatory development goals. Some agencies, for instance, focus on building basic and non-participatory natural or social science research capacities that are adapted to the conditions in the developing world, convinced of the long-term contributions of science to understanding development issues and promoting people's empowerment. In accepting this view of science and developing societies, other agencies also confine themselves to building capacities for scientific research, but enhance other capabilities as well (e.g. networking) to ensure the influence of science on government and NGO development policies or grassroots actions. Still others directly support and encourage participatory action research, pointing to the limits of conventional scientific research in informing development work and believing that knowledge production processes involving beneficiaries best serve participatory goals.

3.3.2 Relevance, location specificity and multidisciplinarity

Against the qualified relationship between changing international discourses and development practices, research capacity building in developing societies has come to mean support for a wide range of activities that shed light on socioeconomic, political and technical change in developing countries or in North–South relations. This includes problem-raising (basic research) and problem-solving research (applied, policy research).[93] With regard to the programmes included in this study, one finds a common concern with building research capacity that will contribute meaningfully to the societies concerned, despite differences in higher education and research systems.[94] The programmes are officially justified by their objective of addressing the research needs that are identified by the Southern partners or expected research users as being critical to their society's development. Judging from their objectives and systems of formulating research agendas, therefore, the programmes included in the study are driven by demand from the ground.

This report accepts programme claims of societal relevance, although it is aware of some of the issues involved in assessing what is socially relevant research. As elaborated in the Bolivian Country Report, actors in the recipient countries represent a multiplicity of interests with have divergent views on priority needs, and the choice of actors by donor agencies is a function of the nature of the cooperation. Thus pro-

grammes oriented toward strengthening particular fields of study would favour the priorities identified by experts in the discipline or related areas, and validate these priorities with Northern academics known to have sufficient understanding of the country. On the other hand, programmes that seek to address the needs of local communities or groups in specific localities tend to devise more participatory processes involving multiple actors in the communities, in addition to expert researchers. Whose participation and how much of it would render a resulting programme demand-driven is an ideological question, the answers to which will vary depending on the underlying philosophy of development. The other question is how much weight should the participation of relevant publics have in the outcome of the negotiations between the donor and Southern partners for a programme to be considered demand-driven.

Granting that the programmes in the study are driven by demand, there are nevertheless interesting similarities and differences among them, in terms of how they relate to or incorporate the interests of the potential users of the research. Since most frameworks of development cooperation consider the explicit impact of research on development processes as a criterion for support, it makes sense to organize the discussion of these similarities and differences along the modalities of institutional arrangements discussed in Section 3.2.

The university-based programmes under Mode I respond to demand emanating from the local universities and society at large for academically qualified researchers and teachers in the social sciences, natural sciences or in multidisciplinary fields (e.g. the environment). At one level, the programmes respond to the academic needs of the partner institutions. For instance, the SIDA/SAREC programme in Nicaragua was created at the initiative of the local universities, which gave priority to the need for training and research in the undeveloped fields of engineering. But because the view that research ought to be grounded in the conditions in the South has become part of the donor community's framework, the academically oriented Mode I programmes aim at another level – to encourage researchers and those under formal training to consult with their respective communities regarding which problems should be tackled.

The areas of research of the Mode I programmes in Table 5 reflect the themes of the new discourses (poverty alleviation, the environment, gender) as well as the salient problems of the countries concerned (e.g. democratization issues in Bolivia, technical underdevelopment in Nicaragua, rural poverty in Vietnam; see Table 4). Moreover, some of the programmes have developed mechanisms for consulting intended research beneficiaries outside academia. The SIDA/SAREC-funded natural science-based programmes in Nicaragua and Vietnam, for example, have benefited from consultations with farmers and representatives of chemical firms and local planners, respectively. In particular, the studies of groundwater pollution and the impacts of

pesticides under SIDA/SAREC's Nicaraguan programme, were formulated in light of the environmental problems of the area. In the social sciences, the SIDA/SAREC programme in Bolivia forged links between researchers and research users in the process of forming various networks (e.g. the Network for Action and Research in Local Development). Presumably, the participants in these networks have contributed to the research agenda and topics supported by the programme. As for the SAREC-supported gender programmes in Tanzania, linkages with the grassroots women who figure in the research are very much a part of feminist participatory strategies and could be assumed to be a mode of doing research in the programme.

The topics pursued by researchers under training in the DANIDA-funded SUDESCA programme were also informed by local needs, since one of its major objectives is to formulate economic alternatives for small communities in Nicaragua. The field-based research required by the themes of DANIDA's ENRECA programme in Tanzania would have also called for some links with potential users, albeit informal, although the Tanzanian country team noted that it operated like any traditional academic cooperation programme, with hardly any connection to end users.
In contrast, the GTZ-funded PROIEB MS programme in Bolivia is closely associated with the network of scholars working on the subject of indigenous peoples, and indigenous peoples are included within the ambit of its training.

Interestingly, among the Mode I programmes, the Belgian-supported CEPLAG is unique in that it is developing more systematically a way of incorporating the views of a cross-section of Bolivian society, among them potential research users, in identifying thematic guidelines and needs for projects. CEPLAG recently conducted public opinion polls of the research community, specialists and institutions in the economic and social areas, the government and NGOs. At the end of this process, various experts, researchers interested in projects and representatives of local institutions attended a workshop at which they consolidated the results of the consultations and defined guidelines and projects.

From a development perspective, however, for most of the academically oriented programmes under Mode I, the formal or informal consultations with end users represent a move toward bridging the gap between academia and society. The heavy demands of graduate training programmes have generally constrained efforts to institutionalize the links with end users. Thus, while there may be consultations during project conceptualization or while a project is ongoing, the managers of academic programmes have usually defer the dissemination of research findings to end users to a later date, if they have thought of it at all. In most instances, however, the timing of academic work does not permit such a "luxury", and the implications of a study are confined to a few paragraphs at the end of a report, without the benefit of feedback and consequent refinement.

That the end user is usually thought of as being marginal to the entire research process, or is hardly considered at all, is understandable within the typical academic frame of mind, given the mode of knowledge production underlying research practice in universities. In the typical depiction of this mode, problems are set and knowledge is produced in a context governed largely by the academic interests of specific communities.[95] These communities are organized by disciplines and are lodged in artificially delineated academic departments. Within these homogeneous disciplinary communities, knowledge is produced along dominant theoretical and methodological paradigms. Quality is determined through a peer review process, which is an effective form of cognitive and social control that reinforces a discipline's definitions of what problems and techniques are deemed important to work on. Finally, disciplines are organized hierarchically, with the basic disciplines presumed to develop or discover the theories to be adopted by the more applied fields. In this typical mode of knowledge production, research utilization is not of primary interest to an academic. Understandably, within this framework, the user is relegated to the end of a knowledge production process, which researchers often have no compulsion to see through. In their minds, theirs is the singular task of producing theories and evolving methodologies.

The university-based programmes covered by the study take for granted the prevalent view of the relationship between knowledge production and utilization. It assumes that research on specific development issues along disciplinary lines will enlighten policy options as long as the research is done according to established norms of scientific practice. Interestingly, however, the programmes do not completely adhere to the assumptions of the traditional mode of knowledge production as depicted above. For instance, by building capacity for agricultural research that is sensitive to the practical needs of poor farmers at the micro-level, the SIDA/SAREC-funded FSRP in Vietnam has moved slightly beyond the assumption that the proper application of basic disciplinary theories and methods will automatically result in useful outputs. Consideration of the needs of farmers and the incorporation of their ideas and other insights from the field into the usual disciplinary approach seem to have enhanced the FSRP's scientific research, as evidenced by the 30 articles published by the programme in international journals. Nevertheless, while FSRP has been quite successful in developing a research capacity that is more sensitive to the inputs of users, the programme's outputs in terms of the knowledge produced lie within the sub-disciplines of agriculture. Moreover, without deliberate efforts to integrate a dialogue between researchers and end users into the research process, the programme still shares the assumption held by academics that quality academic outputs will eventually provide inputs to policy and practice.

The Mode II programmes that are lodged outside a university differ in their tacit or outright acceptance of the assumptions of the traditional academic mode of knowledge production. The UNDP programme in India and the two IDRC-funded pro-

grammes in Vietnam and Bangladesh, VISED and MAP, all aim to build capacity for applied and policy-oriented research at the macro level. The research community and end users in the three countries deem these programmes extremely relevant. The research focus is new for researchers in all the countries studied. Their approach, however, is not. It is essentially disciplinary. The programmes implicitly advocate the application of existing frameworks and methodologies to development issues at the macro level.

MAP draws primarily from the theoretical framework and techniques of neo-classical economic analysis as well as developments in research on social and poverty indicators. VISED's approach seems to have been broader than MAP's in view of its focus on economics in its first year, environment and natural resources in its second year, and the social issues arising from economic development in its third year. Nevertheless, the Vietnamese preference for enhancing skills in economic analysis, which are considered essential in the country's transition to a market economy, is apparent in the reconfiguration of the programme into one that would concentrate on economic management on the one hand, and environmental management on the other. Of these three programmes, India's UNDP programme was the most multi-disciplinary in scope. Like those of VISED and MAP, however, its projects were mostly conducted along disciplinary lines, i.e. as applications of economic, sociological and demographic analysis to specific issues.

On the surface, the APNLBP and the FSRP are similar, in that both aim to do scientific work and develop appropriate technology that will improve the lives of poor farmers. A closer examination of the goals of APNLBP and its implementation, however, suggests a difference in the implicit assumptions about knowledge production, although they may not be articulated as such. The objective of APNLPB is not stated in terms of research capacity building, but of "improving the status of small-scale farmers and processors through the application of biotechnologies in semi-arid farming systems in Andhra Pradesh". More specifically, the programme aims to mitigate some of the negative effects of the asymmetric application of biotechnology, which are already being felt by resource-poor farmers in many developing societies. To meet these objectives requires a shift from a supply-driven transfer of technology approach to a demand-driven perspective that considers the situation of the farmers holistically. Although the end result is the development of appropriate biotechnology for arid regions, the knowledge produced has the potential to transcend the natural science disciplines that intersect in biotechnology, the social sciences and possibly the engineering sciences. Whether this potential is starting to be fulfilled, however, could not be ascertained because the research team did not look into the incipient trans-disciplinary nature of the APNLBP's outputs. Rather, it commended the programme for the technical quality of its work, as judged by peer reviewers within agriculture.

Like the APNLBP, the FTPP and PIRN in Bolivia are equally concerned with improving the conditions in the areas they serve. The FTPP hopes to benefit both the environment and people living near Bolivian forests by advocating community-based forestry management. In the process of its work, the FTPP facilitates strong interactions between researchers and multiple actors involved in community forestry. The networks it has forged involve specialists on the subjects related to the programme goals, as well as members of traditional local communities where it operates. Necessarily, the social scientists and those in the more technical sciences work together in FTPP. The initial tensions have slowly been resolved in the process of addressing common problems.

By working with indigenous communities, PIRN, on the other hand, fosters close links among Indian communities, the scientific community, government technicians and political representatives. The linkages are established through workshops on relevant topics such as intellectual property rights, and legislation regarding Bolivia's natural resources. The scientific community participates through agreements and contracts with research institutions to provide research-based advice and assistance (e.g. cataloguing of plants, organizing collections and archives, etc).

The unarticulated alternative mode of knowledge production underlying the objectives and practices of APNLBP, FTPP and PIRN characterizes the evolution of research areas at the frontier of science and technology. Fields such as computer, materials, biomedical and environmental sciences have often produced demand-driven knowledge that falls between academic disciplines. In the social sciences, development studies cannot be encompassed by any one discipline and lends itself more easily to the alternative mode of knowledge production. This mode consists of cognitive and social practices carried out in the context of application to a concrete problem. The practices transcend the theoretical and methodological positions of the collaborating research partners from different branches of knowledge and disciplines, are organizationally less hierarchical and tend to be more transient. In the course of understanding a problem, researchers go back and forth between the "fundamental and the applied, the theoretical and the practical ... the curiosity-oriented and mission-oriented research".[96] Being locally driven and constituted, the alternative mode of knowledge production is sensitive to local contexts, and is committed to ensuring user involvement not only in the dissemination of findings but also in defining problems and setting research priorities. It recognizes the existence of multiple knowledge sites, and views the scientific practices lodged in universities as just one of many such sites that are brought together in the search for solutions to particular problems. Finally, quality is assessed not only in terms of technical merit but also the usefulness or relevance of the knowledge produced.[97] As a consequence, the emergent research practices are socially more accountable and responsive.[98]

The alternative mode of knowledge production enlightened the design of the MMRPs, although it was articulated in a slightly different way and in a less codified manner at the time the programmes were established.[99] The MMRP documents in the initial years refer to the importance of tapping into and contributing to local knowledge reservoirs in order to ensure that development knowledge is transferred and fully utilized.[100] De Lange expands the notion of the reservoir to include non-scientific inputs from various actors, which may be tapped first for action-oriented results and second for scientific documentation.

Viewing research as an interactive process of producing, storing, diffusing and utilizing knowledge, the MMRPs regard the role of non-researchers, especially those on the ground, as critical in determining the content of the knowledge reservoir. The development processes they engage in produces valuable experiential knowledge that may be equivalent to, if not worth more than academic expertise. For this reason, the MMRPs stress the involvement of stakeholders in setting priorities. They espouse the participation of the intended beneficiaries of development, who possess knowledge that ought to be liberated and incorporated into the reservoir and who stand to benefit from tapping into it, in the process of creating or re-creating knowledge locally. In terms of research capacity, the programmes hope to develop researchers who will foster organic links with communities of stakeholders in order to be receptive to knowledge on the ground, and who are capable of combining local, national and global knowledge and producing quality work. In summary, the MMRPs were conceived to develop potential knowledge sites (being themselves potential knowledge sites) outside the formal institutions of universities, NGOs and the state.

The vision of the MMRPs in terms of a knowledge perspective of development is evolving and will eventually require codification of the experiences of the programmes. For the moment, the articulation of the MMRPs on the ground is in terms of the research thrusts of each programme, the unifying features and operational experiences, with the exception of the KRPLLD in India, which has begun to codify its experiences in terms of knowledge systems.[101]

Compared with the other donor-initiated programmes included in this study (e.g. SIDA/SAREC, DANIDA), the MMRPs reflect a wider focus and orientation. This is the result of the political economic and research contexts of the countries where the programmes were established, their host institutions, and the personalities of their initiators. It is also a consequence of autonomy within the framework of cooperation with DGIS and the related requirement that each MMRP organize a steering committee composed not only of researchers but also representatives of grassroots organizations and possibly government agencies, all in their personal capacities. As previously mentioned, this absolute requirement, in which the MMRPs had no autonomy from the donor, provided the mechanism for autonomous formulation

and implementation of their research agendas. This requirement therefore also accounts for the variations found among the MMRPs.

The PRPA in Bangladesh, KRPLLD in India, NURRU in Uganda and ADESO in Nicaragua are action-oriented programmes although they have supported basic research with implications for problem solving. On a continuum with academic orientation at one extreme and action orientation at the other, the PRPA would lie nearer to the action-orientation than the other three programmes. In terms of demand orientation, NURRU has the lowest level of linkages with the grassroots, even though NGOs constitute one of its stakeholder groups. The Ugandan Country Report notes that the NURRU "has not succeeded in involving a wide array of local stakeholders in its activities". Following the change in leadership, however, plans are being made to move into rural areas and to set up benchmark sites where the active involvement of communities in research will be encouraged.

Although most of the projects of the four action-oriented programmes are conducted at the micro level, the PRPA and KRPLLD also aim to contribute to policy formulation, at the national level for PRPA, and at the state level for the KRPLLD. In this regard, the KRPLLD seems to have been more successful, having worked closely with the state in its bid for decentralized planning. The joint review of the PRPA acknowledged the close relationship between its action research projects and their application, but noted that the search for long-term solutions to poverty or the development of a policy framework for poverty alleviation, a major objective of the programme, has yet to be fully undertaken.

In the light of the institutional weaknesses of the Bolivian educational system and the Soviet-oriented character of Vietnamese social sciences, both the PIEB and the VNRP are keen to develop the social sciences in their respective countries through the relevant studies of the researchers whose capacities they hope to build. In its initial phase, the VNRP funded applied and some basic research in different parts of the country in four research areas. But it eventually chose to focus on rural development in particular regions so as not to dissipate its resources. The same situation holds for the PIEB, which had originally set national targets, but has since chosen to focus on more marginal regions. Both programmes are less action-oriented than either the PRPA or the KRPLLD. PIEB's overriding concern at its inception was to develop the theoretical and empirical grounding for long-range strategic research that would influence local development and policy formulation, which was lacking in Bolivia. Vietnam shares the same orientation, but it has increasingly supported participatory action research in local communities, and has just begun to consider support for pilot studies to identify solutions to the problems of farming unproductive lands faced by the poor minority ethnic groups in the highlands.

At first sight, REPOA in Tanzania seems to have been cast in the same mould as PIEB and VNRP. Upon closer examination, however, their similarity ends with their long-term interest in influencing local development and policy formulation. PIEB and VNRP have not systematically established links with government, even though VNRP is located within the Vietnamese Ministry of Science, Technology and Environment. On the other hand, REPOA's "client" for research and its definition of poverty indicators is the central government. This has framed the nature of REPOA's research outputs significantly – principally policy papers and reports. It has also influenced the programme's concept of capacity building, i.e. support and training for researchers capable of policy research, and training for state officials to enable them to absorb and assimilate research outputs more effectively. Given their own understanding of their vision and mission, REPOA is responsive to the needs of its main stakeholders. Central government, through a variety of interactions, has participated in defining the programme's research objectives. In this connection, REPOA is indeed demand-driven. The measurement of the effectiveness of its research outputs would focus on the policy influence, effected through a variety of channels, such as briefing papers and reports, informal contacts and meetings, training sessions for state officials, etc. Underlying this increasingly dominant thrust in REPOA's direction is the view that development and poverty alleviation are best effected through government.

REPOA has been very effective in what it does. It has participated in high-profile national studies such as the public expenditure review (PER). It is a member of the Tanzania Assistance Strategy (TAS), whose function is to provide a framework for development partnerships between Tanzania and its donors. It contributed to the poverty reduction strategy for debt relief initiative for highly indebted poor countries (HIPCs), and is involved in a task force to formulate and establish the Tanzania Social Action Fund (TASAF). This World Bank-financed fund provides financial support to the local level to enhance and facilitate development.

In terms of linkages with government, REPOA is developing along the lines of other policy-oriented institutions that are supported by other donors, including the World Bank. The participation of central government in the definition of the research agenda of policy-oriented research units and capacity building institutions ensures that this type of research is demand-driven. In exercising its autonomy *vis-à-vis* DGIS, REPOA, which is evidently effective in the policy field, has argued for maintaining its research policy window on grounds of sustainability, as it is now successfully diversifying its sources of support.

Because REPOA is an MMRP, with its critique of the trickle-down models of development and the view that long-term sustainable development can only be achieved with the participation of and access to the knowledge reservoirs of people on the ground, REPOA is also being pulled in another direction. In its programme docu-

ment (1999–2004), reaching the poor is identified as a priority area. The Tanzanian Country Report, however, observes that a strategic plan for dealing with the disenfranchised poor had not yet been formulated at the time of the study. Without specific plans, the identity of the programme would seem to favour its role as a government think tank.

For the KRPLLD, the balance between providing policy inputs to government and grassroots development has been much easier to maintain because of the prevalent activist culture in India, particularly in Kerala. The programme has provided substantial inputs into the state government's planning process in the context of its ambitious bid for decentralized planning through a programme, the Campaign for People's Planning, implemented by the Integrated Rural Technology Centre of the Kerala Sastra Sahitya Parishad. The very name of the programme indicates its orientation. Thus, working for the local government does not pose serious ideological tensions within the KRPLLD. In its work for the state, KRPLLD involves local people who help to gather a variety of socioeconomic data, information on services and infrastructure and data for resource mapping.

As a final point, the MMRPs aim to build demand-oriented and location-specific research capacity. Because of the complexity of most problems in the South, this project requires a multidisciplinary perspective. The research teams observed that compared with some of the other selected programmes, the MMRPs are the most multidisciplinary, but they are still far from achieving the level of multidisciplinarity that is needed. In Vietnam, where research teams are required to involve representatives from different disciplines, the level of interaction and exchanges among them, while insufficiently documented, still leaves much to be desired. The Indian country team noted that slightly more than half of the KRPLLD projects involve interactions among social scientists, natural scientists, engineers and government technicians, but that there is a problem in achieving multidisciplinarity. The team attributed the problem to the weakness of the social science community and the narrow disciplinary functioning of most universities and research institutes in India, an observation that applies to the other MMRPs as well.

Although the problem is surmountable in the long run, the lack of multidisciplinarity in programmes such as the MMRPs is a serious drawback. In their discourse, the MMRPs promise to represent a radical break from the traditional notion of knowledge production (i.e. the application of appropriate theoretical and methodological disciplinary frameworks to development issues in order to produce useful knowledge). For unlike programmes like the APNLBP or the university-based natural science programmes, which are confined to specific fields, the MMRPs have the potential to synthesize a wider range of knowledge. Ideally, the synergy of multidisciplinary teams of researchers working on different problems, in interaction with

users, who themselves have substantial ideas to contribute, could lead to new and valid knowledge that would transcend disciplines.

The challenge for the MMRPs in the future is to determine how they can methodically formulate and conduct multidisciplinary studies of high quality that are linked to viable solutions to development problems. In this regard, there may be a need to balance the programmes' support for inexperienced researchers with funding for multidisciplinary teams composed of experts assisted by younger researchers. The proactive identification of such experts who would be willing to forgo consultancy work or lucrative research projects for the excitement of this relatively uncharted field may be worth a try. The MMRPs would then be in a position to produce within a shorter time frame quality studies that shed light on critical problems in the South. Such studies could serve not only as models for the relatively inexperienced researchers, but also as the raw materials for constructing and codifying elements of emergent theories and methods into new knowledge.

3.4 Building Capacity for Development-Oriented Research: Outputs, Quality and Evaluation

Sections 3.2 and 3.3 noted that there are differences between the programmes in terms of their institutional arrangements, the types of capacities being built and the underlying assumptions regarding development and knowledge production. These differences, as well as variations in country contexts, programme size, duration, organization and history, critically affect capacity building outcomes. Despite the fundamental differences between programmes that make an outright comparison of their outputs inappropriate, this section explores some of the effects of particular modalities of North–South research cooperation on research capacity building in order to identify issues that arise from the achievements and limitations of the programmes.

3.4.1 The impacts of the programmes on individuals, institutions and state/national policies

The university-based research programmes under Mode I build research capacity by strengthening the institutional conditions for research, supporting the formal training of researchers (Masters and PhDs) and consolidating local postgraduate programmes. Their long-term goal is to focus on the more academic type of research capacity building. Within this framework, the programmes studied have had considerable institutional and individual impacts. SIDA/SAREC, for instance, has supported about 55 Masters and PhD students in Nicaragua, 25 of whom have graduated in the last 10 years. In the process, the programme has developed faculties and laboratories for engineering, plant sciences and environmental sciences in universities whose aims are to specialize in building development-oriented disciplines in particular branches of knowledge.

SIDA/SAREC has also strongly supported the research and training activities of the two most important independent research institutes for the social sciences in Bolivia. These research centres have established track records in development-oriented research and action. An unspecified number of individuals have attended training workshops in the two centres and a Masters programme in local development public administration. SIDA/SAREC in Bolivia has since moved on to build university-based social science graduate and research programmes (with equipment and access to bibliographic sources) in two universities, the UMSA in La Paz and the UMSS in Cochabamba. At the time of the study, at least 30 PhD candidates from UMSS had attended a preparatory course prior to conducting a regional socioeconomic analysis.

In Vietnam, SIDA/SAREC has supported the training for almost 30 Masters and PhD holders from the country's four flagship agricultural training institutions. These graduate students have published about 30 papers in international professional journals in the last 10 years, strengthening the strategic agricultural research units in the northern, central and southern regions of Vietnam. SIDA/SAREC's contribution to the development of individual agriculturists and institution building is noteworthy in light of inadequate government support for the three university-based institutions in the past. Although the organization of its support in Tanzania differs from that in Bolivia, Nicaragua and Vietnam, SIDA/SAREC has helped to build capacities for women's studies and feminist networking among 45 and 40 members of a research unit (IDS) and an independent NGO (WRDP), respectively, at the University of Dar es Salaam (USDM).

On a much smaller scale, between 1993 and 1999, DANIDA supported two Nicaraguan students under the SUDESCA programme, together with two students from El Salvador and three from Costa Rica. Through a sandwich programme, five of these graduate students obtained PhDs and one a Masters degree. Although the number of individuals trained in Nicaragua may be too small to constitute a critical mass for institution building, the DANIDA programme has nonetheless launched research linked to the forestry and textile industries in line with its focus on the local economy. It has also established a consortium network of research institutes in the three Central American countries and has laid the groundwork for upgrading graduate programmes in each of the three countries (MSc for Nicaragua). On the other hand, the DANIDA-funded ENRECA programme in Tanzania has affected more individuals than SUDESCA. Between 1995 and 1998, the programme supported 23 research projects, most of which were conducted by young researchers, focusing on farming systems and local resource management. Moreover, by 1999 ENRECA's sandwich graduate programme had produced two Masters and three PhDs.[102]

Like some of the programmes funded by SIDA/SAREC and DANIDA, GTZ's Bilingual Intercultural Education Programme (PROEIB) in the Andean region has made headway in training and networking. It has fostered a network involving 19 universities, 20 indigenous organizations and five government ministries working on the subject of indigenous peoples. In particular, at the time of the study, PROIEB in Bolivia was supporting 50 students from nine indigenous communities and five countries in the MSc programme at the Universidad Major de San Simón.

Finally, of the programmes under Mode I, the individual and institutional effects of the Belgian-funded CEPLAG programme are the most difficult to ascertain. The launch of the programme was delayed due to conflicts between Bolivian and Belgian professors in the process of creating a research culture in the area of planning and management. At the time data were gathered in Bolivia, six projects that will involve collaboration between Bolivian researchers and Belgian academics had been approved for presentation to the Flemish Inter-University Council, and plans for supporting graduate student research were being drawn up. Resource persons expressed the hope, however, that CEPLAG will take off in much the same way as another Belgian-supported research centre in the area of natural resources, CEMAR, did in 1997.

Programmes located in government institutions (VISED in Vietnam and MAP in Bangladesh) were set up with very clear ends in view: to produce personnel qualified to conduct research that will address policy needs. The evidence from the study is that both programmes have had considerable impacts, despite their relatively short duration: VISED had supported 33 research projects on economic, environmental and science and technology issues by 1999. In addition, the programme had trained about 1000 persons in short-term management courses and sent 70 individuals abroad to establish linkages with research institutions and individuals working along similar lines. VISED also produced a significant number of research reports, articles and books, which are claimed to have been used for policy purposes. More importantly, it has contributed to the creation of a "culture" in which research is seen as important to policymaking.

In Bangladesh, MAP aims to provide policymakers with institutional arrangements and technical capability to monitor poverty on a regular basis and to analyse the impacts of macroeconomic and structural adjustment policies at the micro level. Accordingly, MAP has supported 11 focus studies on poverty. It is reported to have accomplished a rare type of capacity building in relevant government departments, namely, building expertise for monitoring poverty and obtaining systematic data for policymaking on poverty alleviation. In this connection, MAP has trained an unspecified number of government professionals at the Bangladesh Bureau of Statistics through seminars on poverty indicators and 10 hands-on surveys. MAP has also provided training for members of the Bangladesh Planning Commission in the use of

the computable general equilibrium model, the social accounting matrix and the general algebraic modelling system. By 1999, MAP had established a network of line agencies, institutions, departments and NGOs involved in poverty studies and monitoring.

India's UNDP-funded programme was not as focused as MAP, but during its brief time frame, the programme supported 63 projects. Although 41 of the principal investigators were trained researchers, representing established institutions in regions where research capacities are relatively better developed, the programme was able to add to the capabilities of senior and some young researchers, by expanding the definition and areas of development beyond the field of economics. Given the academic bent of most of the researchers and their professional status, the programme produced 62 reports, discussion papers and several books.

Despite differences among the Mode II programmes that formed their own institutional set-up outside a university, the MMRPs, the APNLBP in India and the FTPP and PIRN in Bolivia are very similar in terms of the type of capacity they are aiming to build. As discussed previously, these programmes hope to substantiate the concept of demand-driven research, to popularize a participatory approach to research, and to institutionalize the process of learning from the masses. All of these programmes reject the concept of knowledge for its own sake. They also emphasize the importance of disseminating information to end users, be they policymakers at the national level, as in the case of the MMRPs in Bolivia, Tanzania and Vietnam, or local communities, officials and political leaders, as in the other programmes.

Among these programmes, the MMRPs are supporting the largest number of researcher-initiated projects (about 641) on a wide range of topics, the outputs of some of which have been used as inputs to policy formulation or to the crafting of viable solutions to concrete problems. Although there have been a number of failed projects and research quality has been uneven, as of 1999, MMRP research involved at least 765 individuals. Since many of these individuals have very little research experience in the subject of their study – because they were young, originate from NGOs or had no exposure to participatory methodologies – the MMRPs are building capacities through training workshops on a range of topics related to research methodology. Informal training is also provided by means of study circles in which researchers come together to discuss the progress of their work (KRPLLD and PRPA) or in systems of tutorship or mentoring of junior researchers by senior researchers (e.g. ADESO, PIEB and VNRP). Apart from on-the-job training for project directors, the MMRPs also reach other young researchers who are not actually conducting MMRP studies in the regions or countries concerned. As an example, by 1999 PIEB had held 13 training courses on project formulation for as many as 537 participants, many of whose proposals were not considered for programme funding.

Unlike university-based graduate degree programmes or focused capacity building programmes like MAP, most of the MMRPs deal with inexperienced researchers, whose studies do not usually culminate in measurable outputs like Masters or PhDs. Moreover, for many of the programmes, the processes of conducting participatory research are just as important as the outputs, if not more so. Given these features, it is difficult to ascertain capacity building outcomes primarily on the basis of the number of individuals who obtain projects or go through training. In the absence of systematic qualitative data on improvements in individual capacities, it is worth noting the country teams' observations regarding the palpable effects of the MMRPs on individual researchers in view of their low levels of baseline expertise. The Indian country team, for instance, commended the KRPLLD for building the capacity of a new breed of "barefoot researchers" who have begun to develop a research culture through their involvement in the programme. These researchers have incorporated their new learning in "spin-off" institutions like the Centre for Environment and Development, Sreyas (Prosperity) and Maithri (Friendship), which have arisen from projects funded by the KRPLLD.

The institutional impact of each of the MMRPs is notable. In addition to the institutions in Kerala noted above, other spin-offs from the dissemination of KRPLLD research findings include the Institute for Communicative and Cognitive Neurosciences and the Limnological Association of Kerala. By funding half of its projects, the KRPLLD has also helped strengthen the Integrated Rural Technology Centre (IRTC), a research institute set up by the Kerala Sastra Sahitya Parishad (KSSP) to develop capability for local planning within the state. In Bangladesh, the PRPA has established research circles, forging a network of five research institutions. Similarly, the VNRP has established a network of researchers in different regions of Vietnam and an effective research management system that has led the Ministry of Science, Technology and Environment to consider it a model for other research cooperation programmes.

In Latin America, PIEB has set up regional libraries and documentation centres in 19 institutions in seven cities in Bolivia. This contribution is in addition to the efforts to institutionalize mechanisms for reaching potential researchers in deprived areas, while maintaining a national presence in order to influence policy. ADESO has established a public agenda-setting process in order to prevent the reinstitution of clientelist procedures based on patronage. In Africa, REPOA has built itself into an important institution for poverty research in Tanzania. Not only does it facilitate and manage poverty research involving relatively inexperienced researchers; it also brings together senior researchers to undertake policy studies. In Uganda, NURRU's initial management problems meant that it lagged behind the other MMRPs in broadening its own network of local institutions. Nevertheless, this network has been established and its new leadership vows to set the processes of proposing and pursuing research in place.

On the whole, the MMRPs are building an institutional capacity to manage research programmes that are autonomous of host institutions and donors. Despite issues of autonomy from their host institutions, leadership problems and understaffing, in general, the steering committees have ably directed the MMRPs, while the secretariats of individual programmes have developed effective systems of research management and financial administration

In India, like the MMRP, the APNLBP aims to enhance the capacities of individual researchers, research institutions, NGOs and the grassroots sector, particularly farmers. The Indian Country Report notes that while many of the principal investigators in the 42 APNLBP research projects are middle-level scientists, the project teams include a number of junior researchers, many of whom are women. Apart from developing the capacity of young researchers in biotechnology research, the programme also contributes to the diversification of the activities of established research institutions and NGOs to non-traditional areas like micropropagation through tissue culture, vermiculture composting, the production of bio-fertilizers and pesticides, integrated pest management systems, etc. Furthermore, the programme has exposed biotechnology scientists to the new methodology of participatory technology development. Institutionally, the APNLBP has established very good rapport with relevant research institutions in Andhra Pradesh and its government departments, with the federal government's Indian Council of Agricultural Research and the Department of Biotechnology, with other research institutions in India and with the collaborating research programmes in Kenya and Zimbabwe.

The FTPP in Bolivia aims to develop and disseminate participatory methodologies for local communities in planning sustainable forest management systems, utilizing the traditional knowledge of indigenous peoples living around the forests. Studies by university researchers constitute about 30% of FTPP's activities. The FTPP has encouraged capacity building for research and action of graduate students as well as members of indigenous communities. With respect to university-based researchers, the programme has assisted an unspecified number of individuals in conducting action-oriented studies, requiring immersion in the indigenous communities and understanding of grassroots organizations. The FTPP has also provided training for members of indigenous communities to become "barefoot researchers", some of whom have the potential to pursue careers in participatory research and planning. Institutionally, the FTPP has established national and regional networks of focal points for community forestry in its efforts to decentralize action. The members of these networks, who meet each year, participate in electronic conferences, debates about the projects, and other interactive events. Regarding capacity building, FTPP's activities are carried out in collaboration with social organizations and research centres in Bolivia, such as the UMSS, the Council of the Indigenous Peoples of Bolivia (CIDOB), the University of Nur and PIEB itself, among others.

PIRN's ultimate aim is to assist the local development of Bolivia's indigenous peoples by training them to recover and reintroduce their lost technologies. The programme has supported at least 21 research teams that are accountable to the indigenous population, which decides on the extent and follow-up of projects, even though the teams' proposals and outputs are subjected to peer review. For the researchers involved in these projects, PIRN/CIDOB provides tailor-made training courses on research methodologies and techniques, as well as computing skills, information handling, photography, and the use of video recorders and other audio-visual equipment that they may require. Interestingly, the teams are also given training in project management (accounting, dealing with bank accounts, elaborating research reports, etc.). By extending such training, PIRN has begun to institutionalize research management systems. It is notable that some members of the indigenous communities have participated in the research and management training activities.

All the programmes included in this study seek to build and enhance capability either for academically oriented or action-oriented research. Three points are worth noting regarding the above discussion. First, this study highlights various achievements in enhancing individual and institutional capacities, as indicated by the number of graduate degrees obtained, hands-on involvement in research, participation in training workshops and qualitative signs of personal or institutional development. However, it is unable to compare different modes of capacity building in terms of their effects on individual researchers and institutions. Although there are significant overlaps because research is essentially an intellectual exercise, the types of capacities being built and the contexts within which they are being developed are different. Because of this, and the belief that the all of the capacities enhanced by the programmes are needed in developing societies, the research team decided to refrain from making judgements regarding which programmes are more effective than others in enhancing capabilities.

The second point has to do with training and capability building. The assumption of all programmes is that training, broadly conceived, builds individual research capacities. While this is generally true, the nature and methodology of the training, the sensitization of individual researchers to new experiences, their ability to integrate new learning, and their personalities, among other factors, will determine the outcomes in terms of the capacities developed. Thus, the extent to which training – whether in the form of hands-on research or specialized skills workshops – enhances capacity cannot be assessed conclusively. Without baseline information, a programme's training activities constitute only one set of many possible factors that account for its achievements in capacity building, or lack of them. Having made this qualification, however, the findings of the comparative study show that in the countries where they are found, the programmes, through their research and training

activities, have contributed to the appreciation of research for development in general, and to the evolution of different research cultures in particular. Whether such cultures will further evolve from the seeds sown by the programmes will be the ultimate test of their efficacy in research capacity building. In this connection, there is enough evidence from a cursory look at the current crop of established Southern researchers produced by donor-initiated programmes in the past to hope that the research and development community will build on the gains made in the programmes studied.

The third point deals with the impact of the programmes on the capacity of researchers and research institutions to influence policy and/or satisfy the needs of the larger societies in which they are found. Without exception, the programmes aim to address development needs and to influence policy, whether this is national or regional policy on specific public issues or science and technology policy at different levels (including the methodologies to use under particular conditions). Even programmes that are not aware of their interests in influencing policy, such as the university-based degree-related research programmes, may virtually contribute to shaping national science and technology policy in their substantive areas. Some of the programmes, however, are more important than others in national or regional policymaking in the more visible political/economic arena.

MAP in Bangladesh and VISED in Vietnam explicitly link their research and training activities to policymaking on economic and environmental issues. Both programmes tie up with the highest planning offices of their respective governments and encourage policymakers to utilize their outputs (e.g. the social accounting matrix and Poverty Monitoring System of MAP). Among the MMRPs, REPOA has been recognized by the Tanzanian government for its actual or potential inputs to public policy on poverty alleviation. The PRPA in Bangladesh has also provided inputs for legislation; in particular, its research and advocacy on gender violence helped to shape the Women and Child Repression Prevention Act, which was enacted in 1995 and revised in 2000. As discussed previously, KRPLLD has had a major influence on planning and policymaking in the state of Kerala on issues within the programme's expertise. In Latin America, the findings of two of PIEB's research projects have contributed to the elaboration of public policies on education reform and on the military.

Having qualified the achievements of the programmes in terms of capacity building, what has been their impact on the development needs of the countries where they operate? The desired and actual effects of the programmes under Mode II on specific development needs are more obvious. Some of these effects may be gleaned from the discussions in the previous sections. Nevertheless, a few points regarding the impacts of policy research on prevailing conditions in developing societies are worth

mentioning. It is important, for instance, to be aware of the pitfalls of thinking that policy research will necessarily translate into actual policy.

Whether one is dealing with countries in the North or the South, it is difficult to assess the impact of research on policy because the intended and unintended outcomes usually result from the interplay of multiple factors. But problems of attribution are more pronounced in developing countries where planning and policy formulation deviate considerably from the models of rational policymaking found in the literature. While a genuinely rational planning process may be an illusion, there are societies where the parameters and processes of decision making, albeit irrational in many respects, are more transparent, primarily because of the adherence to common principles and rules and the existence of strong constituencies that demand participation and accountability. In such societies, research policy units are in a better position to specify how their inputs have shaped thinking on particular issues and have helped in drafting policies to address them.

The contributions of the programmes to policy notwithstanding, the question of whether the more policy-oriented among them have figured in policymaking should be addressed in the context of the policy environment of developing societies. More often than not, decisions are made arbitrarily, without the benefit of systematic information. Even when consultative discussions with experts are held, these are frequently used to legitimize predetermined decisions made in the interest of particular groups. Within such an environment, policy researchers and advocates spend considerable time lobbying, negotiating, building networks, doing a lot of spadework in the background, including writing for politicians who may not grasp the essence of the bills they champion or the administrative orders they issue. Researchers are pressured to perform such multiple tasks often without clear indications of whether their efforts have borne fruit.

In the frenzy of dealing with important actors on the national scene, some researchers have come to think that their work is valued and of consequence to policymaking. Many, however, awake from their illusions when they realize much later that the policy outcome is different from what they had hoped for. Others, whose policy recommendations are adopted, discover for themselves the absence of institutional continuity, in that policies are revised after every change in leadership. In very rare instances, policy researchers and advocates do succeed in influencing policy perspectives and in drafting specific recommendations that are eventually owned and adopted by policymakers. They may come to think their work is done, only to become painfully aware of the chasm between policy formulation and practice. But because many of the policymakers in developing societies are academics, advocacy for proper implementation no longer seems to fall within their scope of work. Far too often, therefore, the post-policy phase, which spells the difference in terms of impact on development, is left to chance except for particular issues and research

areas where linkages among academics, committed government officials, civil society groups, members of the private sector and the media exist.

For the Mode I programmes that build research capacity through graduate training, their direct impact on the development needs of the countries concerned is difficult to pinpoint, apart from their obvious contribution to the development of higher education institutions. Nevertheless, the local researchers interviewed in Bolivia, Nicaragua and Tanzania stressed that their programmes' research agendas and the topics selected for study are relevant to local needs. The Vietnam country team also highlighted the wider application of a number of techniques developed with SIDA/SAREC support. On the question of whether the Mode II programmes address development needs in greater measure than the academic Mode I programmes, the deliberations of the Vietnam country team regarding the relative strengths and weaknesses of the various programmes in the country are instructive. The team discussed the difficulty of judging the advantages of one programme over another in terms of relevance to development. They argued convincingly that the need for various skills in developing societies is so great that all of the programmes have special niches. Having previously experienced training under more academic capacity building programmes, like the SIDA/SAREC-funded FSRP, the members of the Vietnam team claimed that they were more appreciative of the MMRP-type of participatory and development-oriented research.

This insight raises the question of whether a critical mass of previously trained researchers to draw upon or to reorientate would improve the chances of success of the MMRP mode of research capacity building. The problems confronted by NURRU in Uganda or the difficulties REPOA has faced in developing the capacity for bottom-up research in Tanzania, because the researchers they had assumed existed were not there, seem to suggest that prior training is a prerequisite. This position is bolstered by experiences in countries like the Philippines, where the staunch proponents of mainstreaming participatory approaches in academia were themselves leading social scientists trained in quantitative social sciences. On the other hand, the experience of the KRPLLD in India, which produced barefoot researchers out of committed activists with no prior research training, qualifies this thinking. While training may be necessary to give pioneering researchers the confidence to shift mental frames and the credibility for others to follow suit, it does not seem to be a prerequisite for building participatory research skills. The different outcomes in Africa, on the one hand, and in India and Nicaragua on the other, may be due to the culture of activism and affinity with work at the grassroots in the latter two countries. How to support potential researchers in Africa to cross the bridge is the challenge to the MMRPs in the region.

The Tanzanian and Ugandan Country Reports allude to the lack of mentoring for potential researchers. Indeed, the research conditions in the two African countries

are polarized. There are very few well-trained, well-established, and experienced researchers and they tend to be engaged in consultancy work. On the other hand, a much larger number of "potential" researchers who have postgraduate degrees but have had very little training or lack opportunities to undertake research makes the challenge of devising mentoring schemes more daunting than in, say, Bolivia, Vietnam or the other countries where MMRPs are found. Moreover, the African Country Reports note that members of the research community consider the involvement of people in research at the grassroots as the work of activists, and thus may undermine the value neutrality of science.

Having argued that previous formal training in research is not a prerequisite for the development of capabilities in participatory research, it is nevertheless important to emphasize that not all activists, grassroots community members, local officials or technicians on the ground can be turned into barefoot researchers. Those, however, with the potential to pursue their personal missions or careers in development-oriented research ought to develop in other respects. Even the Indian Country Report, which documents the relative success of KRPLLD in producing barefoot researchers, asserts that if the enormity of the tasks ahead is taken into account, the efforts to develop raw researchers have touched only the fringe of the problem. They require training not only in particular skills, but also in conceptualizing and contextualizing research problems. For this, the MMRPs will need more time for reflection and theoretical work.

Interestingly, in countries like Vietnam, which has well-organized geographic communities but an undeveloped participatory culture, the potential development-oriented researchers may be difficult to find on the ground. Neither can they be found among the elite researchers in government institutes. At this juncture, the potential researchers are in the agricultural universities, which have obtained very little research support from the state. In the situation VNRP is beginning to face, the development of conceptualization and theoretical skills may be easier because of the academic background of the researchers; the greater challenge is to build participatory cultures in the wider research community as studies are pursued in specific localities.

The issue of building the capability of young researchers for field-based development research is important, if not more important, to the MMRPs than the other programmes under Mode II. Programmes like FTPP and PIRN, for instance, focus more on the substance and capacity of research to enlighten actions that will contribute to the solution of identified community problems than on the number of researchers trained.[103] On the other hand, VISED in Vietnam and MAP in Bangladesh were set up to undertake research that addresses policy needs.[104]

The MMRPs do not only aim to find such solutions in the medium and long term, nor to provide specialized data for policymakers. Rather, they hope to build a community or even a movement of development researchers committed to a particular mode of doing research in a developing society. It is in this context that the Asian and Latin American MMRPs monitor their gaps in mentoring despite the considerable gains they have achieved in terms of the number of young researchers trained and research projects successfully completed.[105]

3.4.2 Quality and evaluation

Notwithstanding their achievements and the visibility they have attained within a short time, the MMRPs have criticized themselves for the uneven quality of their research output. This problem does not bother the university-based graduate research programmes as much because academic standards and systems of assuring quality are in place. The only problem facing these programmes is to ensure compliance with the standards set by the disciplines and the universities nationally and internationally. The fact that some of the young researchers in particular programmes had presented papers at conferences or published in international journals singly or together with Northern co-authors reflects the good quality of their work as judged by peers in the international academic community.

Quality assurance is also less problematic for the policy-oriented research programmes of MAP, VISED and the UNDP. International academic standards for the quantitative social science disciplines constitute the yardsticks for these programmes. Moreover, since the stature and competence of researchers are believed to be important in order for policymakers to heed the implications of policy studies, most of the researchers in these three programmes are well established and are familiar with the analytical tools of the relevant disciplines.

The issue of quality is important but not as salient to the programmes closest in orientation to the MMRPs – APNLBP, PIRN and FTPP. The usefulness of the studies conducted in these programmes for concrete action, whether in the form of adoption by farmers of new technologies developed with their inputs, or the implementation of community-based forest management schemes, or the recovery of indigenous knowledge and technologies, is the gauge of their value. In the case of the APNLBP, technical quality is assessed by the academically rooted but evolving standards in the field of biotechnology.

Quality assurance seems to be more prominent in the consciousness of the MMRPs because of one distinguishable feature. With the exception of REPOA, which simultaneously undertakes substantive research and manages studies initiated by individuals and institutions outside the programme, the MMRPs do not aim to perform research, but only to promote and fund (ideally) high-quality and socially relevant research, conducted (preferably) by young researchers. Selected on a competitive

basis with extensive use of peer review, the research projects fall within the ambit of a research agenda that is broader than those of the more focused development-oriented and participatory programmes included in the study. Moreover, the projects range from academically oriented studies to action research, albeit within the framework of participatory development.

The character of the MMRPs as facilitators of research rather than convenors of multidisciplinary teams of expert researchers assigned to address specific development issues constitutes their niche. The Indian Country Report, which likens the MMRP to the biblical sower of many seeds, admiringly remarked on the diversity of the issues selected by the researchers in Kerala, which the usual top-down research agenda approach could never have hoped to capture. But precisely because they cast wider nets in societies with uneven research capacities, the MMRPs are more vulnerable to problems of research quality.

To improve technical quality, the MMRPs have devised closer monitoring and mentoring schemes. As noted previously, these schemes include networks of senior researchers in agricultural institutes, and the creation of two positions for senior research scientists in Vietnam; study circles of researchers in particular regions in India and Bangladesh; academic advisers for projects in Bolivia; and tutorships for junior researchers by senior researchers in Nicaragua.

A major challenge facing the MMRPs and similar programmes that aim to build capacity for demand-driven research, and ultimately produce useful knowledge that transcends disciplinary boundaries, is how to measure in qualitative and quantitative terms the output of process-oriented research with multiple outcomes. In the MMRP mode of knowledge production, technical quality is only one dimension of quality. Social relevance is the other. Existing standards of science and scholarship are used to assess technical quality and the MMRPs do utilize such measures when they say the quality of their output is uneven. But how much weight should be given to technical quality and how much to relevance is not easy to spell out for high-impact projects that are not easy to define as research in the conventional sense. Take the following example:

> "Among the research projects financed by ADESO, the most successful in terms of social impact was probably the simplest and least pretentious. In 1996, a researcher from EAG [Escuela de Agricultura y Ganadería, School of Agriculture and Livestock], member of ADESO's general assembly, presented a proposal to study the effects of earthworms in the diet of house chickens. The researchers already knew that earthworms were a good source of protein that could increase the production of eggs. Their challenge, therefore, was to let potential users discover the advantages of this technology on their own. To accomplish this objective, the researchers

> from EAG selected a group of 12 residents of one of the poorest communities in the region. All were women who traditionally took care of the backyard production of the household. The researchers gave wooden boxes and worms to the participants, and taught them how to breed the worms using the manure available in the property. The participants were instructed to feed some of their chickens using variable amounts of worms, and then to log the number of eggs laid on a daily basis. The results were very positive: the egg production increased and the worms also provided a valuable organic residue that could be used in the home gardens. As these effects became obvious, the participants not only adopted this new technology but also invited their neighbours to repeat the experiment. In less than two years, about forty families were successfully breeding earthworms."

The usual standards of technical quality cannot be applied to this case, since to conduct quality research by conventional standards was not the researchers' objective. In spite of, or perhaps because of, its simplicity, this project is an exemplary case of participatory research with a gender approach. Moreover, this research was very relevant to the local community (which needed to identify more reliable sources of protein).

As they are evolving, most of the MMRPs, as well as PIRN, FTPP and APNLBP, are part of a movement based on the democratization of knowledge, development and the state. This movement stresses cultural diversity within a global perspective, humanity within and as part of nature, a view of development that permits people to discover the realities of their life and to make decisions to transform it, and a mode of governance that promotes autonomy, initiative and capability.[106] Comprehending the nature of a specific development process that is largely invisible requires more than the usual research techniques. In addition to the traditional skills that the research community has absorbed, a nuanced reading of development that is iterative and gradual also entails "listening skills, the ability to combine an open and non-judgmental approach with enough understanding to make sense of and draw insight out of what one is observing", and a capacity to reflect on and intuit underlying movements.[107]

Clearly, the conventional quality indicators of academic research such as peer review, publications and citations in professional journals are not very relevant to a demand-driven, participatory research. New indicators of quality and social relevance may have to be slowly incorporated into existing evaluation indicators. The Indian Country Report suggests, for instance, non-scientific publications, public discussions based on research output, the discovery of new products and processes, and societal peer pressure as possible indicators. The Latin American Country Reports also suggest indicators of intermediate and qualitative outcomes that could be used, including the following:

- the dissemination of research values and relevance, as demonstrated by changes in attitudes towards research (on the part of the general population, as well as policymakers);
- the sensitivity and receptivity of researchers to local knowledge;
- the awareness of the importance of self-governance and the exercise of autonomy to decide on a research agenda that meets local interests;
- the popularization of the participatory approach to research and the process of learning from the masses; the commitment to the production of research results of quality and of relevance;
- the capacity to negotiate, design, implement and manage research programmes; and
- the determination to be accountable both to the local community and to the donor.

Developing meaningful indicators is a tall order and would require sifting through conventional measures, unpacking the dimensions of development research, and identifying possible qualitative indicators and measures of processes that do not lend themselves easily to formalization. Fortunately, the MMRPs and similar programmes need not start from scratch. The literature on some of the methodological issues surrounding participatory research provides a good starting point.[108]

3.5 Linkages between Donor-Initiated Programmes

The programmes included in the study have established or maintain various linkages with donors, stakeholders in the locality and other communities of researchers. The various forms of participation of the donor in programme activities were discussed in Section 3.2 and are summarized in the Concluding Remarks. The linkages with various stakeholders in each country, on the other hand, were dealt with in Section 3.3.

This section gives a brief overview of the linkages between the programmes and the traditionally delineated knowledge sites in the society concerned (e.g. universities) and other research networks in the South. With respect to the first linkage, the university-based programmes reviewed are intimately linked to building the capacity of academic programmes that hope to produce knowledge in particular disciplines or multidisciplinary fields (e.g. the environment). Links among the programmes within a university (CEPLAG, SIDA/SAREC in Tanzania, ENRECA) or among the universities covered by a programme in different countries (SIDA/SAREC in Bolivia, Nicaragua and Vietnam) are well established. In Latin America, the inter-university and inter-institution networks of SUDESCA/DANIDA and PROIEB cut across countries in the region. Moreover, innovative ways of linking Southern countries facilitated by donors have been developed. As noted earlier, the new phase of the SIDA/SAREC programme in Bolivia will support training for social science

researchers, but instead of sending them to a university in Sweden for disciplinary training (sandwich Masters and PhD courses), they will pursue graduate degrees in reputable Latin American universities.

On the other hand, for programmes lodged outside the halls of academe, links with university-based researchers have taken different forms, with academics involved in projects as researchers (the MMRPs, MAP), consultants or trainers (the MMRPs, FTPP, PIRN). Except for Tanzania, informants from the research community, many of whom are university-based, generally appreciate the MMRPs' support for academic researchers. From the perspective of some informants, the MMRPs have contributed directly or indirectly to building institutions in universities that would otherwise pay lip service to research but concentrate their efforts on teaching. For instance, the rectors of agricultural universities in Vietnam, which do not receive significant research funds from the state, favourably noted the improvements in their faculty's performance, skills and work ethic as a result of their involvement in the VNRP.

In the case of Tanzania, the country team draws attention to the potentially weakening effect of REPOA on the local universities. This situation is unique to REPOA. As noted previously, the programme is the only one among the MMRPs engaged directly in research. With its focus on establishing a track record in quality research, REPOA has involved experienced university researchers in contracts and projects. Some resource persons perceive this practice as taking senior faculty members away from their mentoring functions or from building research institutions within the university.

As for international networks, linkages with researchers in other parts of the world are evident in the programmes. Particular researchers funded by university-based programmes have been able to present papers at conferences and to establish informal links with other researchers working in the same field. Some of the programmes also maintain linkages with research networks. For instance, the EPRC in Uganda has had extensive connections with the African Economic Research Consortium (AERC).

A number of programmes (MAP in Bangladesh, the APNLBP in India and the MMRPs) are part of umbrella programmes with related or similar projects in other countries. The country teams noted international workshops and seminars where projects are conceptualized or common issues are discussed. For action-oriented programmes like PIRN and FTPP, their participation in international initiatives have not necessarily focused on research, but on a wider range of issues related to indigenous peoples or community forestry, respectively.

In the case of the MMRPs, funds have been set aside and used for joint workshops and exchanges among representatives and researchers of the programmes. As well as the annual meetings of coordinators, there have been joint activities among MMRPs. As a case in point, the three Asian MMRPs took turns in hosting regional workshops where the project directors from the three countries presented papers. Two workshops were held in Kerala (India) and Vietnam in 1998, and one in Bangladesh in 2000. Attended by representatives of the steering committees, the secretariat and selected project directors, the workshops allowed fruitful intellectual and institutional exchanges. At the last workshop in Bangladesh, the participants discussed a common framework for collaboration among the three countries, and plans for two initiatives: a thematic workshop on a rice-fish farming model of agriculture in Vietnam in September 2000, and a joint review of poverty alleviation activities in the three countries.[109] Joint activities such as these, however, have been infrequent. It is notable that although the MMRPs have the funding flexibility for programmes in different countries to interact and exchange researchers, initiatives in this direction have not been as significant as one would expect. Apart from the busy schedules and imperatives facing Southern researchers, and the preoccupation of the MMRPs with establishing their identities in their own countries, this observation may also suggest that establishing genuine connections among Southern researchers requires more than the mediation of donors and the provision of funds. Among other things, it would entail changing the mindset of Southern researchers themselves.

Shaped by the asymmetries of colonialism and development and the consequent control over knowledge, the prevailing mindset, which is oriented to the North and oblivious to other Southern countries, is extremely difficult to change. Nevertheless, because of their common concerns and intimate links with the problems of their societies, development-oriented researchers working on the ground ought to find it easier to slowly change the orientation. Seen in this light, the MMRPs are an experiment in changing the South–North orientation and forging collegial ties among like-minded researchers who share the same spirit of development. The substantive exchanges among MMRP managers in coordinators' workshops indicate the positive effects of collaboration. But the low level of interactions among the MMRP researchers, despite the availability of funds, suggests constraints on South–South collaboration that need to be explored and addressed.

4 Concluding remarks

The highlights of this comparative study are presented in the Executive Summary. This section further encapsulates the answers to the four questions for reflection that the initiators and designers of the MMRPs asked themselves in the course of implementing a major policy shift in donor-initiated capacity building.

- ***Are the asymmetries reflected in the "conventional" programmes of research cooperation also present in the cases under study?***

The level of asymmetry in research cooperation reflects the changes in the direction of North–South relations, world politics, international discourses and donor budgets for research. In the light of these developments and the consequent changes in donor policy, conventional forms of research cooperation moved away from the provision of development funds for training grants in the 1950s, 1960s and 1970s, to the establishment of programmes in the South with varying links to the North.

The issue of power and control lie at the heart of the question of asymmetry. The designers of the MMRPs contended that the autonomy of Southern partners in the collaboration is essential in order to ensure that research priorities, agenda setting and research activities will meet the demands or needs of the recipients.
The assumption here is that the adequate perception of needs is to be found among the recipients and potential beneficiaries, and not among the donors. A decision-making process conducted autonomously by the recipients was considered the most adequate means to articulate and meet that demand.

Against this backdrop, do the Northern partners continue to wield as much control over programmes as they did when the first conventional programmes were established in the 1970s and 1980s? Judging from the experiences of the programmes compared in the study, the answer is a qualified no. In the cases analyzed, donor control and, conversely, autonomy, is manifested at different levels. Common to all programmes, including the MMRPs, is the donors' control over decisions regarding specific regions or countries in which the programmes should be located, and the broad field of knowledge or area of activity that should be supported. Particular to the MMRPs, the establishment of a steering committee with representation from various stakeholders was a non-negotiable requirement of DGIS funds. The recipients would consider donor control over these decisions a legitimate level of intervention on the part of donors.

Beyond the choice of countries, partner institutions/groups and broad areas to support, the degree of autonomy of local partners in choosing research themes and topics within a broad research field varies across programmes. A number of programmes (FTTP, PIRN and PROEIB in Bolivia; MAP in Bangladesh; VISED in Vietnam; APNLBP in India; the Women's Studies programmes in Tanzania) are "thematic", meaning that the donors had made earlier decisions regarding the "themes"

to pursue. The themes, which have been influenced by international discourses and their interface with conditions in particular countries, range from gender to economic reform, to biotechnology for small farmers, etc. Despite the donors' decisions on thematic concerns, however, the programmes themselves decide on specific research problems, and enjoy autonomy at the implementation and management levels, although they are subjected to monitoring mechanisms established by the donors.

The more academic programmes implemented by universities and research institutes have autonomy from the donors to identify and select specific research topics and, in some instances, themes and priorities. At the same time, however, they have to conform to existing university/research centre criteria and practices, and their goals are institutionally circumscribed. Thus, their autonomy in terms of programme design and financial management is restricted.

There is general agreement among the country teams that the MMRPs have a far greater degree of autonomy than the comparator programmes. The local network established in each case has ample decision-making powers over all aspects of the programme: its design and purpose, administrative organization, including planning and budget, the research agenda, the type of capacity building aimed for, project selection criteria, to monitoring and evaluation. This form of strategic, academic and administrative autonomy has no precedent in the history of research collaboration in the countries concerned, and the local stakeholders who were interviewed expressed their appreciation.

A final note on institutional autonomy, Comparing university-based programmes with those that are either independent or autonomous of but lodged in host institutions, the latter enjoy greater autonomy. University-based programmes tend to be encumbered by university regulations and constraints and are more vulnerable to academic politics. On the other hand, among most of the programmes outside universities, there is no evidence of any difference in the level of autonomy between those that operate independently of an established institution and those that are lodged in institutions. Systems of governance involving highly respected members of society, the specificity of programme frameworks, the programme's participation in larger international networks, or the novelty of its research agenda have prevented the host institutions from overturning major decisions of the programmes lodged in them. MAP is a case in point. The paradigmatic nature of the underlying theoretical framework of the programme's efforts to monitor poverty in Bangladesh, the specificity of its methodology and the fact that it is a part of an IDRC-funded cross-country programme protect its autonomy from its host institution.

Regarding the most suitable arrangements for the purposes of institutional autonomy, there is a trade-off between being an independent programme and being

lodged in a host institution. For all the non-university-based research programmes, without exception, the credibility of their host institution has contributed to their acceptance by the wider development community. For instance, the PRPA's association with the Grameen Trust has augured well for its reputation in circles working on poverty alleviation in Bangladesh. Ironically, the PRPA also demonstrates the need to balance the gains from being hosted by a reputable institution and autonomy. Informants in Bangladesh expressed concerns about some aspects of the relationship between the Grameen Trust and PRPA, and its influence on the long-term development of the programme (e.g. the NGO has applied its own administrative procedures and salary scales to programme operations, and appoints members of the PRPA steering committee, chair and the programme director).

On the other hand, programmes that are not lodged in any institution do not have to weigh the costs (to autonomy) and benefits of institutional affiliation. Independence, however, may lead to problems of accountability if the programme has not developed a significant community – which could be a host institution, a research community, concrete local communities, or the imagined community of development workers in a particular region or country. This was the case with NURRU in Uganda, when it suffered serious management problems in an early phase of its development.

Has full autonomy enabled the programmes to develop capabilities that they would not have developed otherwise? For the MMRPs, which are the only programmes that enjoy full autonomy, the answer is in the affirmative. The space or autonomy to substantiate the programmes has boosted the capacity of the Southern partners in programme design and management. The MMRPs have the leeway to experiment with organizational structures and to effect new systems of project selection and monitoring. In this connection, full responsibility for programme design and management gives the MMRPs the opportunity to learn iteratively and to shift gear if the situation warrants it, changing procedures, making amendments, and redirecting resources when required by stakeholders or by unforeseen events. There have been several such occasions in the "history" of the programmes, but perhaps the most outstanding examples are the African MMRPs, which have made profound changes in their objectives and organization in an attempt to play the role they have defined for themselves. Many of the systems and structures that have evolved since the launch of the programmes are innovative and have served as models for other cooperation programmes in some countries (e.g. Vietnam).

The MMRPs' autonomy has also enabled them to focus on major local issues, some of which had been given little priority in previous research and development efforts. The issues of concern to the programmes, such as poverty, social protection, gender and the environment, became even more visible in the areas where the programmes are found. It could be argued that the donor community has picked up these issues.

Indeed, in some of these countries, funding agencies have supported projects in these areas. Picking up a critical issue, however, is not only what the MMRPs aim at. Of greater importance is bringing these issues to the attention of local communities, and encouraging them to organize themselves, to reflect on and negotiate their needs, and to try to translate them into researchable topics. The skills and attitudes associated with building a participatory culture among researchers and end users is certainly one type of capacity that can only be built up by programmes with the autonomy to adjust their research activities in an iterative process that simultaneously empowers end users.

Finally, the autonomy granted to the MMRPs to design programmes that are suited to local conditions has resulted in interesting variations in their character and chosen focus. For instance, PIEB and ADESO represent very different thrusts, as do the VNRP and the KRPLLD. In turn, the autonomy of individuals to choose research topics within the areas defined by the programmes, as well as the character of most MMRPs as research facilitators rather than convenors of research teams have allowed a "hundred flowers to bloom". The research facilitated by the programmes through a competitive selection process ranges from academic studies to action research, albeit within the framework of participatory development. From one viewpoint, the wide range augurs well for the MMRPs. Reiterating a point made earlier, the Indian Country Report, which likens the MMRP to the biblical sower of many seeds, admiringly remarked on the diversity of the issues selected by the researchers in Kerala, which the usual top-down research agenda approach could never have hoped to capture.

- ***From the perspective of the recipient countries, is the Netherlands policy for cooperation, as contained in the MMRPs, any different from the "conventional" forms of North–South cooperation, or from the policies adopted by similar agencies? What are the differences and similarities between these policies, specifically in terms of the characteristics or attributes of the programmes: their autonomy in decision making (control over policy, management and budget), their duration, and their focus on demand-driven, multidisciplinary, location-specific research and participatory practices?***

The MMRPs are located in an ongoing debate regarding development and how it ought to be brought about. On one side of the debate is the position that growth is an important goal for the South and that its achievement will result in development and poverty reduction with minimum interventions on behalf of equity concerns.[110] On the other hand, while economic growth is deemed important, the other position would argue against the simplistic notion that any growth achieved in the South will trickle down to the grassroots. Proponents of this position would argue that political economic structures operating in developing countries constrain the distribution of the benefits of growth to the larger population.

From their documents and practices, the MMRPs would seem to be found on the equity side of this debate. But the development strategy they implicitly espouse emanates from the interplay of other discourses.

The implicit MMRP development strategy assumes that structural transformation or development in the South requires more than government action or the intervention of elites. It entails the organization and mobilization of resources and people at the grassroots because in the end, the outcomes of development programmes will depend on whether people on the ground have a sense of ownership of the process. Moreover, the sustainability of the development process rests on the empowerment of the citizens of developing societies, particularly the poor who constitute significant segments of the population.

What would it take to empower the poor? In the 1970s and 1980s, the strategy for popular empowerment in the developing world focused on the organization of sectors and communities. But in societies that have become increasingly knowledge-based, the organizing process toward empowerment ought to go hand in hand with access by the poor to knowledge reservoirs, and the capacity of relevant groups to integrate existing knowledge pools on the ground and produce new knowledge if necessary. But the capacity to produce new knowledge in the conventional knowledge sites (universities) in the South is constrained by the limits of the disciplinary mode of knowledge production in the face of development problems. In this discursive context, the MMRPs have called for problem-oriented (demand-driven), location-specific and multidisciplinary (preferably participatory) research. This evolving experiment with an alternative mode of knowledge production has put the MMRPs potentially in a position to produce meaningful knowledge at the frontiers of development theorizing.

At the programme level, the MMRPs are oriented towards research-based solutions to development problems. As such, they are oriented towards action and policy changes. The programmes, however, are also academically oriented in so far as they aim to contribute to the knowledge reservoir and to the development of an alternative mode of knowledge production.

The MMRPs share many common characteristics with the programmes based outside universities. To all intents and purposes, the APBNLP is an MMRP. The PIRN and FTPP also share basic assumptions regarding development strategies and knowledge production, although they do not cast their work in a knowledge perspective. They differ from the MMRPs in terms of the scale of coverage and their specialization in particular issues. The MMRPs cover a much wider range. The university-based programmes share, albeit to different degrees, the demand orientation

of the MMRPs. At the same time, they differ fundamentally in terms of the mode and thrust of knowledge production and the nature of their programmes.

The MMRPs are unique because of the potential level of integration and coherence of their philosophy of development and knowledge, design, and the leeway they have to implement the programmes iteratively. But the MMRPs in the seven countries have not yet levelled off fully in terms of the operationalization of their unifying links and the evolving articulation of their underlying philosophies.

- ***Are the programmes implemented by the different donors producing the desired results? Here, the focus is on the various types of research capacity building (institutional and individual; conducting and managing research; research appreciation and use); the production of results of quality and relevance for achieving development objectives; and the establishment of scientific relationships with other countries (international research collaboration), etc.***

On the whole, the country teams were impressed by the achievements of the research capacity building programmes they reviewed. Seen against the yardsticks of the objectives they set for themselves, the programmes have performed well, with a few exceptions. The details of these achievements are found in various parts of this report and in the Country Reports.

The results of the programmes have varied with the nature of the research cooperation. In summary, the university-based programmes have produced researchers with formal graduate degrees and several publications in local and international journals. Researchers in collaborating institutions have formed networks or incipient communities of researchers, which in the case of Latin America cross national borders. The specialized programmes (VISED and MAP) have trained a significant number of researchers and, in the case of MAP, have produced indicators for use in poverty monitoring.

The action-oriented programmes PIRN and FTPP have had an impact in that they have provided training for researchers working in the areas of indigenous peoples and community forestry. The APNLBP and the MMRPs in turn have made inroads in producing relevant research. They have instituted mechanisms to ensure that they are sensitive to the needs of the locality concerned, and are responsive to systems of quality control. The fact that the processes of agenda setting, calling for project proposals and proposal evaluations are totally in the hands of the local partners constitutes a major departure from traditional modes of research cooperation.

As a final note on the achievements of the MMRPs, of all the programmes studied, the MMRPs are the most ambitious. Not only do they require researchers to become

immersed in the development processes in the localities where they are working, but more importantly, they demand a change in mindset and a willingness to explore knowledge production at the frontiers without clear-cut guidelines. The MMRPs are admittedly still far from achieving their long-term capacity-building goals, despite their remarkable successes in the short periods of their existence.

One must be cautious about underestimating the amount of time it will take for innovative programmes such as the MMRPs to meet their rather non-traditional and ambitious objectives. The time span required is definitely longer than in conventional undertakings where the objective is only to commission a few projects, preferably by established researchers. In the case of MMRPs, the objective is not only to conduct research, but also to build capacity, not for "conventional" research, but for demand-driven and multidisciplinary research. The process of agenda setting involving research users requires a long preparatory phase. It also takes time to put in place new institutional structures outside the established research systems. Unlike conventional research, therefore, there is greater need for review and consolidation at every stage in the MMRPs.

- ***Is the policy implemented by the Netherlands government applicable only to some types of research, particularly those involving specific regional needs, or could it be adopted in a more general way in other forms of North–South research cooperation?***

The mode of North–South cooperation operationalized in the MMRPs is most appropriate for research involving regional or local needs that are as close as possible to the ground, although it is important to stress the need for links to critical national and regional policymaking bodies. This mode does not seem to be suitable for academic discipline-based capacity building programmes in the natural sciences, such as those funded by SIDA/SAREC or DANIDA. The MMRP mode, however, may be an appropriate model for university-based, problem-oriented capacity building programmes in the social sciences and multidisciplinary and applied scientific fields such as plant breeding, biotechnology and environmental studies.

The researchers are cautious in generalizing the MMRP mode of North–South cooperation, with autonomy as its leitmotif, and applying it to other forms of research cooperation. For one, potential partners in the developing world represent conflicting or contradictory ideological priorities and power positions. To circumvent the dilemmas that might arise from linking up with groups that hold divergent views of development, the choice of partners who will work closely with groups whose interests ought be served (e.g. the poor) is critical.[111] In bilateral cooperation involving governments, however, it would be a breach of protocol and an exercise of asymmetry for a donor to specify and insist on its chosen partner from among government agencies or local institutions.

In conclusion, the international scientific cooperation programmes included in this study represent a diverse range of forms of cooperation. Although each funding agency has its own policies and priorities, most of them have tried to balance their interests and those of Northern researchers and universities with those of their Southern partners. There are strong indications from the programmes studied that donors are becoming increasingly aware of the sensibilities of their local partners and the needs of the locality in which their programmes are found. Moreover, local partners have gained more autonomy in agenda setting and the management of their donor-initiated programmes than their counterparts two decades ago.

As science and technology in most of the countries covered are at an embryonic stage and the needs in these countries are many, the diversity of scientific cooperation is a positive development that is welcomed by the recipient countries. At the moment, donor-initiated capacity building programmes have found particular niches in the South.

Paradoxically, the observation in the Nicaraguan Country Report regarding the challenge posed by this diversity for the development of science also applies to the other countries. Even though there are many agencies acting in the different countries, their resources are modest. The fragmentation of these resources may mean that the development of the scientific sector is less efficient than it could be under ideal conditions. Despite the fact that the Southern partners in the foreign cooperation programmes enjoy academic and administrative autonomy, the foreign agencies usually end up taking many decisions that are crucial to the cooperation (such as which research areas, geographical regions and types of institutions are to receive priority). The lack of communication and coordination among the donors and the leaders of the various programmes exacerbate the fragmentation.

Having engaged in enlightening discussions with representatives of the donor agencies and the programmes, the regional coordinators of this comparative study can only wish for more sharing among the resource persons interviewed for this study. It is in this light that this report concludes with a recommendation to create a forum for international scientific cooperation programmes in the countries involved. Such a forum would reveal to the funding agencies and local programme managers their similarities and differences. It may also lead to an agenda-setting process whereby the research needs of the country are assessed in the concrete contexts of geography, politics, economics and culture. It is hoped that the establishment of such a forum will enhance convergence on very basic assumptions and approaches to development and capacity building in the South, and respect for divergent positions. In some of the countries studied, the national government may be in the best position to bring together key players in the development research community (e.g. the Ministry of Science, Technology and Environment's international cooperation or

linkages division in Vietnam). For other countries, the convenors may be an emerging network of government agencies, research institutions/universities, donors and end users.

The proposed forum is only one of many possible strategies for bringing together donors and the research communities to reflect upon and elaborate the modalities of capacity building they have chosen to support or to participate in, in the light of their evolving philosophies of development and knowledge production. In this process they may reflect on the effectiveness and appropriateness of the modalities they are operationalizing within the prevailing political, economic and social contexts. In assessing the corresponding achievements in harnessing science and technology for development, donors and recipients may reaffirm or revise the research modalities they have painstakingly developed over the years. In so doing, they may cover significantly more distance than they already have in pushing the current limits of capacity building for development-oriented and empowering research in the South.

References

Albro, R. 1998. "Introduction: A new time and place for Bolivian popular politics". *Ethnology: An International Journal of Culture and Social Anthropology* 37: 99-115.

Anh, V.T. 1994. *Policy reforms and Economic Growth*. Singapore: Institute of Southeast Asian Studies.

Annis, S. 1988. "Can small-scale development be large-scale policy?", in *Direct to the Poor. Grassroots Development in Latin America*, edited by S. Annis and P. Hakim. Boulder and London: Lynne Reiner Publishers, pp. 210-217.

Bagachwa, M.S. 1985. "Toward new initiatives in capacity building in developing countries", in *Proceedings of the Workshop on Research Programmes for Development, Arusha, 19-23 June.* DGIS-Funded Research Programmes for Development No. 2, edited by M.S. Bagachwa. The Hague: DGIS, pp. 36-42

Bakhuisen, K. 1999. "NUFU compared: Report of a desk study on comparative research capacity building programmes" (draft).

Baser, H. and J. Bolger. 1996. "From technical cooperation to capacity development: changing perspectives in the Canadian International Development Agency". CIDA website http:// www.acdicida.gc.ca/xpress/dex9608.

Boer, L. and L. Box. 1994. "The tenuous interface: policymakers, researchers and user-publics: the case of the Netherlands development cooperation". *Knowledge and Policy*, pp. 158-174.

Bunders, J.F.G. and C. Mukherjee. 1998. "North–South research partnerships". Paper presented to the Working Group on Science and Technology and Network for National Capacity Building, 28-30 September 1998, Malta. United Nations Centre for Science and Technology Development.

Byrnes, R.M. 1992. *Uganda: Country Study*. Federal Research Division, US Library of Congress. http://lcweb2.loc.gov/frd/cs/ugtoc.html.

Close, D. 1988. *Nicaragua: Politics, Economics and Society*. London: Pinter Publishers.

De Lange, P. 1995. "Societal direction and utilization of research: Rethinking the role of non-researchers", in *Proceedings of the Workshop on Research Programmes for Development, Arusha, 19-23 June.* DGIS-Funded Research Programmes for Development No. 2, edited by M.S. Bagachwa. The Hague: DGIS, pp. 67-74.

Directorate-General for Development Cooperation. 1997. *Report of the Leusden workshop: The case of the multi-annual, multidisciplinary research programmes: A comparative study of different approaches to development cooperation*, DGIS-Funded Research Programmes for Development No. 4. The Hague: DGIS.

Directorate-General for Development Cooperation. 1992. *Research and Development*. DGIS White Paper. The Hague: DGIS.

Fals Borda, O. and M.A. Rahman. 1991. *Action and Knowledge: Breaking the Monopoly with Participatory Action Research*. New York: Apex Press.

Franke, R. and B. Chasin. 1994. *Kerala: Development through Radical Reform*. New Delhi and San Francisco: Pronilla Publishers and Institute for Food and Development Policy.

Gaillard, J. 1996. "International scientific cooperation", in *20th Century Sciences: Beyond the Metropolis*, vol. 7. Paris: ORSTOM.

Gibbons, M. *et al.* 1999. *The New Production of Knowledge. The Dynamics of Science and Research in Contemporary Societies*. London: Sage Publications.

Greenwood, D. and M. Levin. 1998. *Introduction to Action Research: Social Research for Social Change*. San Francisco: Sage Publications.

Griffin, K. 1996. "The state and economics of cocaine: The case of Bolivia", in *State, Markets and Development: Essays in Honour of Rahman Sobhan*, edited by A. Abdullah and A. Khan. Dhaka: University Press.

Grillo, R.D. and R.L. Stirrat. 1997. *Discourses of Development: Anthropological Perspectives*. Oxford and New York: Berg Publishers.

Hansen, H. and M. Twiddle. 1999. *Developing Uganda*. Oxford: James Curey and Ohio University Press.

Hudson, R.A. 1991. *Bolivia: Country Study*. Federal Research Division, US Library of Congress http://rs6.loc.gov/frd/cs/botoc/html.

Kaplan, A. 1999. *The Development of Capacity*. Geneva: UN Non-Governmental Liaison Service.

Lather, P. 1986. "Issues of validity in openly ideological research: Between a rock and a soft place". *Interchange* 17: 64-84.

Long, N. and A. Long. 1992. *Battlefields of Knowledge: The Interlocking of Theory and Practice in Social Research and Development*. London: Routledge & Kegan Paul.

Mamoon, M. and J.K. Ray. 1996. *Civil Society in Bangladesh: Resilience and Retreat*. Calcutta: Firma KLM Private Ltd. Department of History, University of Calcutta.

Merrill, T. 1994. *Nicaragua: Country Study*, Federal Research Division, US Library of Congress. http://rs6.loc.gov/frd/cs/nitoc/html.

Mlambiti, M. E. 1999. "Tanzania: Implementing structural adjustment programmes – learning from the past", in *Agrarian Economy, State and Society in Contemporary Tanzania*, edited by P. Forster and S. Maghimbi. Aldershot: Ashgate.

Murray, G. 1997. *Vietnam: Dawn of a New Market*. Surrey: China Library.

Netherlands Ministry of Foreign Affairs. 1998. *Bangladesh: Evaluation of Netherlands-funded NGOs, 1972-1996*. The Hague: Netherlands Ministry of Foreign Affairs.

Netherlands Development Assistance. 1998. *Bolivia: Evaluation of the Netherlands Development Programme with Bolivia*, vol. 2, Main Report. The Hague: DGIS.

Netherlands Development Cooperation. 1994. *Evaluation of the Netherlands Development Programme in Tanzania, 1970-1992*. The Hague: DGIS.

Petit, J. 2000. "Strengthening local organizations: Where the rubber hits the road". *IDS Bulletin* 31: 57-67.

Pronk, J. 1989. "Development research never can be neutral: a conference review", in *Research and Development: The Role of the Netherlands Cooperation*, edited by C. Schweigman and U.T. Bosma. Amsterdam, the Netherlands: Royal Tropical Institute.

Qualman, A. and J. Bolger. 1996. "Capacity development: A holistic approach", CIDA website http://www.acdicida.gc.ca/xp[ress/dex9608.

Reddaway, B. 1996. "The Bangladesh economy in a world perspective", in *State, Market and Development. Essays in Honour of Rahman Sobhan*, edited by A. Abdullah and A. Khan. Dhaka: University Press.

Rev, A. 1997. "The donors' discourse: Official social development knowledge in the 1980s", in *Discourses of Development: Anthropological Perspectives*, edited by R.D. Grillo and R.L. Stirrat. Oxford and New York: Berg Publishers, pp. 81-105.

SAREC and IDRC. 1991. *Knowledge in the Pursuit of Change*. SAREC and IDRC.

Sathyamurthy, J.V. 1984. *Development Research and Social Sciences in India since Independence*. DERAP Publication 171.

Sharer, R. *et al.* 1995. *Uganda: Adjustment with Growth, 1987-1994*. Washington, DC: International Monetary Fund.

Shinn *et al.* (eds.), 1997. *Science and Technology in a Developing World*. Dordrecht, The Netherlands: Kluwer Academic Publishers.

Smith, H. 1994. *Nicaragua: Self-determination and Survival*. London: Pluto Press.

Smith, S. and D. Willms. 1997. *Nurtured by Knowledge: Learning to Do Participatory Action Research*. Ottawa: International Development Research Centre.

Spaapen, J. 1997. "Research and policy development in the Netherlands: A radical turn to the South", in *Science and Technology in a Developing World*, edited by T. Shinn *et al.* Dordrecht, The Netherlands: Kluwer Academic Publishers, pp. 211–240.

United Nations Conference on Trade and Development. 1999. *Making North–South Research Networks Work*. Document prepared in cooperation with the European Centre for Development Policy Management (ECDPM). New York and Geneva: UNCTAD.

United Nations Development Programme. 1999. *Human Development Report*. New York: Oxford University Press.

VNRP. 2000. "Three-country regional workshop on Netherlands-funded programmes", *VNRP Newsletter* 2000: 6.

Waardenburg, G. 1994. "Strategic choices for a Northern development-oriented research policy: The case of DGIS", in *Development-Related Research Collaboration: The Role of the Netherlands*, edited by C. Schweigman and I.A. van der Werf. Amsterdam: Royal Tropical Institute, pp. pp. 137-146.

Whyte, W.F. 1991. *Social Theory for Action: How Individuals and Organizations Learn to Change*. London: Sage Publications.

Zachariah, M. and R. Sooryamoorthy. 1994. *Science for Social Revolution? Achievements and Dilemmas of a Development Movement: The Kerala Sastra Sahitya Parishad*. London: Zed Books.

Notes

1 See Report of the Leusden Workshop: *The case of the Multi-annual, Multidisciplinary Research Programmes: A Comparative Study of Different Approaches to Development Cooperation.* DGIS-Funded Research Programmes for Development No. 4, 1997. The Hague: DGIS.

2 The Division has since been renamed the Division for Research and Communication.

3 DGIS, 1992. *Research and Development*, White Paper. The Hague: DGIS.

4 See, for instance, Waardenburg, G., 1994. "Strategic choices for a Northern development-oriented research policy: The case of DGIS", in *Development-Related Research Collaboration: The Role of the Netherlands*, edited by C. Schweigman and I.A. van der Werf. Amsterdam: Royal Tropical Institute, pp. 137-146.

5 For a concise discussion of the 1992 policy of DGIS and its origins in the colonial period and post-colonial transition in the Netherlands, see Spaapen, J., 1997, "Research and policy development in the Netherlands: A radical turn to the South", in *Science and Technology in a Developing World*, edited by Shinn, T. *et al.* Dordrecht, The Netherlands: Kluwer Academic Publishers, pp. 211-240.

6 The complete research proposal is part of the document cited in note 1, pp. 20-27.

7 For extensive information on the local context, the programmes, their design and strategies for building research capacity, see the seven Country Reports (Bangladesh, Bolivia, India, Nicaragua, Tanzania, Uganda and Vietnam).

8 For a succinct discussion of the interface of development perspectives, science, technology and society studies, and North–South exchanges, see the editors' introduction to Shinn, T. *et al.* (eds) (1997: 1–29). This section of the report takes off from the periodization and development perspectives discussed in the Introduction to Shinn *et al.* (eds), although different periodizations could be argued as well. Shinn's periodization takes 1985 as the pivotal year both for neo-liberalism (structural adjustment) and the collapse of the Soviet bloc. Alternatively, neo-liberalism and structural adjustment are better traced to 1980 or 1981 and the collapse of the Soviet Union in 1989. Nevertheless, this section elaborates on the ideas in the Introduction on the basis of the experiences of the countries included in the study as well as other sources.

9 The Ford Foundation, Rockefeller Foundation, Fulbright-Hays Program and Colombo Plan, for instance, provided funds for future professionals from developing societies to pursue training in particular disciplines. In the case of Vietnam, the training of future scholars and researchers of government institutes and universities in Russia, Eastern and in some cases, Western Europe was subsidized by the state with Soviet bloc assistance.

10 The term "Third World" was used to distinguish developing countries from the First World of industrialized capitalist nations and the Second World of socialist societies.

11 Development discourse here refers to a more or less coherent frame of reference that defines appropriate and legitimate ways of practising development, as well as

speaking and thinking about it. See Grillo, R.D. and R.L. Stirrat, 1997. *Discourses of Development: Anthropological Perspectives*. Oxford and New York: Berg Publishers, p. 14.

12 For a discussion of participatory frameworks embedded in the discourses of donors, see Rev, A., 1997. "The donors' discourse: Official social development knowledge in the 1980s", in *Discourses of Development: Anthropological Perspectives*, edited by R.D. Grillo and R.L. Stirrat. Oxford and New York: Berg Publishers, pp. 81-105.

13 Baser, H. and J. Bolger, 1996. "From technical cooperation to capacity development: Changing perspectives in the Canadian International Development Agency". CIDA website http:// www.acdicida.gc.ca/xpress/dex9608; Qualman, A. and J. Bolger. 1996. "Capacity development: A holistic approach". CIDA website http//www.acdicida.gc.ca/xpress/dex9608.

14 Petit, J., 2000. "Strengthening local organizations: Where the rubber hits the road". *IDS Bulletin* 3: 37-57.

15 SAREC and IDRC, 1991. *Knowledge in the Pursuit of Change*. SAREC and IDRC, pp. 5-7.

16 United Nations Conference on Trade and Development 1999. *Making North–South Research Networks Work.* Document prepared in cooperation with the European Centre for Development Policy Management. New York and Geneva, UNCTAD.

17 See, for instance, the case studies on the assessment of international scientific cooperation compiled in Gaillard, J., 1996. "International scientific cooperation", in *20th Century Sciences: Beyond the Metropolis*, vol. 7. Paris: ORSTOM Éditions.

18 Bunders, J.F.G. and C. Mukherjee, 1998. "North–South research partnerships". Paper presented to the Working Group on Science and Technology and Network for National Capacity Building, Malta, 28-30 September 1998. United Nations Centre for Science and Technology Development.

19 *Reader on the Joint Review of the Multi-Annual, Multidisciplinary Research Programmes*, Oegstgeest, The Netherlands, 1998. DGIS-Funded Research Programmes for Development No. 5, as cited in the Vietnam Country Report.

20 Bakhuisen, K., 1999. "*NUFU Compared: Report of a Desk Study on Comparative Research Capacity Building Programmes*" (draft), p.48. See the Country Reports for brief descriptions of the inception of the MMRPs.

21 At the Leusden workshop some of the 12 developing country scholars argued to the effect that other donors besides DGIS were also implementing modalities of support that aim to address the asymmetry and irrelevance associated with traditional North–South cooperation.

22 When the original research proposal was written, the researchers believed that DGIS could perform the "mapping exercise" considering their access to other donors and their diplomatic representatives in the countries concerned. This did not prove feasible, however, given the lack of response from some donors, and the unavailability of information in the countries that could be used by the Dutch representatives. The change of plans turned out to be beneficial for the researchers, in that they used the mapping exercise to familiarize themselves with a wide range of donor-funded programmes. They were also able to make contact with a number of

researchers, research managers, policymakers, NGOs, grassroots organizations, etc., who provided valuable insights that may not have otherwise been possible.

23 With the exception of the UNDP programme in India, which began in 1995 and ended in 1997, following the demise of Professor T.N. Krishnan, the driving force behind the project and one of the charismatic founders (with Dr K.M. Raj) of the Centre for Development Studies, VISED in Vietnam, which evolved into a different programme, and the IDRC support for local NGOs in Nicaragua.

24 Tanganyika, a collection of tribal entities, gained independence from the UK in 1961. In 1964, after an interim period when it became a UN Trust Territory, signed an Act of Union with Zanzibar to form the United Republic of Tanzania. Netherlands Development Cooperation. 1994. *Evaluation of the Netherlands Development Programme in Tanzania, 1970-1992*. The Hague: Netherlands Development Cooperation, p. 48.

25 Netherlands Development Cooperation (1994: 52).

26 The main political party was the Tanganyika African National Union (TANU), launched in 1954 by Julius Nyerere, Tanzania's first president. Netherlands Development Cooperation (1994: 48).

27 Bagachwa, M.S. 1985. "Toward new initiatives in capacity building in developing countries", in *Proceedings of the Workshop on Research Programmes for Development, Arusha, 19-23 June 1985*. DGIS-Funded Research Programmes for Development No. 2, edited by M.S. Bagachwa. The Hague: DGIS, pp. 38-39.

28 Netherlands Development Cooperation (1994: 52).

29 Following the Arusha Declaration, vigorous government efforts, especially in the areas of health and education, resulted in a significant improvement in average life expectancy, from 41 years in 1960 to 54 years in 1990, and a drop in mortality rates among children below 5 years old from 248 per 100 in 1960, to 170 per 100 in 1990. Netherlands Development Cooperation (1994: 56).

30 Mlambiti, M.E., 1999. "Tanzania: Implementing structural adjustment programmes – learning from the past", in *Agrarian Economy, State and Society in Contemporary Tanzania*, edited by P. Forster and S. Maghimbi. Aldershot: Ashgate, pp. 10-12.

31 Netherlands Development Cooperation (1994: 52).

32 Hansen, H. and M. Twiddle, 1999. *Developing Uganda*. Oxford: James Curey and Ohio State University Press, p. 38.

33 Hansen (1999: 38); Byrnes, R.M. *Uganda: Country Study*. Federal Research Division, US Library of Congress 1992. http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+ug0074.

34 Byrnes, R.M., 1992. *Uganda: Country Study*. Federal Research Division, US Library of Congress. http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+ug0074).

35 Sharer, R. *et al.*, 1995. *Uganda: Adjustment with Growth, 1987-1994*. Washington, DC: International Monetary Fund, p. 1.

36 Byrnes, R.M. 1992. http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+ug0013).

37 Hansen (1999: 38).

38 See the Tanzanian Country Report.
39 Netherlands Development Cooperation (1994: 48).
40 Byrnes, R.M., 1992. http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+ug0013).
41 The World Bank's poverty threshold is US$1 per day per person at 1985 purchasing power parity.
42 Bagachwa (1995: 40-41).
43 Byrnes, R.M., 1992. *Uganda. Country Study*. Federal Research Division, US Library of Congress. http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+ug0066).
44 World Bank, 1991. *The African Capacity Building Initiative.* Washington, DC: World Bank, as cited in Bagachwa (1995: 41).
45 Bagachwa (1995: 40-42).
46 See, for instance, the Tanzanian Country Report.
47 Bangladesh gained independence from Pakistan in 1971.
48 The significant growth in the number of NGOs in Bangladesh may be traced to the donors' preference for channelling development funds through them because of their ability to identify appropriate beneficiaries and to involve them in project implementation. By the mid-1990s, about 20 major bilateral and multilateral donors (excluding international private foundations and foreign NGOs) were channelling their funds through NGOs. Netherlands Ministry of Foreign Affairs, 1998. *Bangladesh: Evaluation of Netherlands-funded NGOs, 1972-1996*. The Hague: Netherlands Ministry of Foreign Affairs, p. 58. It is important to note that the dynamism of NGOs in Bangladesh does not necessarily translate into a well-developed civil society. See, for instance, Mamoon, M. and J.K. Ray. 1996. *Civil Society in Bangladesh: Resilience and Retreat*. Calcutta: Firma KLM Private Ltd. Department of History, University of Calcutta.
49 Franke, R. and B. Chasin, 1994. *Kerala: Development through Radical Reform*. New Delhi and San Francisco: Pronilla, and Institute for Food and Development Policy, pp. 112-113.
50 See Netherlands Ministry of Foreign Affairs, 1998. *Bangladesh: Evaluation of Netherlands-funded NGOs, 1972-1996*. The Hague: Netherlands Ministry of Foreign Affairs, pp. 45-49.
51 The *Doi Moi* policy had among its elements the decentralization of state economic management and decision making, the adoption of an outward-oriented policy in external economic relations and the acceptance of the private sector as the engine of economic growth. Six years before the policy was introduced in 1986, the Vietnamese government had begun to experiment with readjusting economic policies, orienting the country toward trade liberalization. Murray, G., 1997. *Vietnam: Dawn of a New Market*. Surrey: China Library, p. 24-25; Anh, V.T. 1994. *Policy Reforms and Economic Growth*. Singapore: Institute of Southeast Asian Studies, p. 7
52 It is important to note, however, that the extent of state ownership of farms and enterprises was much greater in Vietnam than in India, and that Kerala has had a communist government only intermittently.

53 Murray, G., 1997. *Vietnam: Dawn of a New Market*. Surrey: China Library, p. 7.

54 Khan, A.Z.M. and A. Abdullah, 2000. "Governance issues loom large", in *The Daily Star*, February 2000, Dhaka. See also Reddaway, B., 1996. "The Bangladesh economy in a world perspective", in *State, Market and Development. Essays in Honor of Rahman Sobhan*, edited by A. Abdullah and A. Khan. Dhaka: University Press Ltd, pp. 297-299.

55 It is important to note that India (Kerala) has a long and respectable tradition in the sciences. In the social sciences, Indian intellectuals and academics in the 1970s and 1980s contributed to theoretical debates on development issues that were enlightened by Marxism but fully aware of Western social science traditions. The theoretical and anti-empiricist inclinations of prominent Indian intellectuals nurtured a strong culture of knowledge production for its own sake. However, a critical mass of intellectuals, activists and grassroots organizations has strongly pushed for the application of knowledge to address the problems confronting the country.

56 See the Indian Country Report.

57 See Sathyamurthy, J.V., 1984. *Development Research and Social Sciences in India since Independence*, DERAP Publication 171.

58 Zachariah, M. and R. Sooryamoorthy, 1994. *Science for Social Revolution? Achievements and Dilemmas of a Development Movement: The Kerala Sastra Sahitya Parishad.* London: Zed Books, pp. 17-18.

59 Two wars had profound consequences. First, following the War of the Pacific (1879–1883), Bolivia lost its seacoast and rich nitrate fields to Chile. In the period 1925–35, Bolivia lost nearly half of its territory due to wars and bilateral agreements. Second, the Chaco War with Paraguay led to coups, the politicization of the Indians and the formation of political groups, of which the MNR was the most significant (Hudson, R.A. 1991. *Bolivia: Country Study*. Federal Research Division, US Library of Congress.) http://rs6.loc.gov/frd/cs/botoc/html. Netherlands Development Assistance, 1998. *Bolivia: Evaluation of the Netherlands Development Programme with Bolivia*, vol. 2, Main Report. The Hague: DGIS, p. 17.

60 The Revolution led to the institution of a civilian government, universal suffrage and primary education in the rural areas, enhancing in the process the indigenous population's identification with the Bolivian nation.

61 Mining has long been an important sector of the Bolivian economy. The silver industry was an important feature of colonial life, with Indians toiling in the silver mines for the Spanish coffers. However, the silver industry suffered a sharp decline in the late 1880s, to be replaced by the tin industry. By the end of World War I, Bolivia was the world's second largest producer of tin, with a fifth of the world's output.

62 Hudson, R.A. 1991. http//rs6.loc.gov/cgi-bin/query/r?frd/cstdy@field(DOCID+bo0011). Netherlands Development Assistance (1998: 20).

63 Hudson, 1991. http//rs6.loc.gov/cgi-bin/query/r?frd/cstdy@field(DOCID+bo0011).

64 For example, the majority of the dismissed workers in the state-controlled Mining Corporation of Bolivia entered the coca trade. Bolivia's cocaine industry, the world's second largest supplier of cocaine, is said to be the country's biggest employer. See Hudson, 1991. http//rs6.loc.gov/ cgi-bin/query/r?frd/cstdy@field(DOCID+b00011). Griffin, K. 1996. "The state and economics of cocaine: The case of Bolivia", in *State, Markets and Development: Essays in Honor of Rahman Sobhan*, edited by A. Abdullah and A. Khan. Dhaka: University Press Limited. pp. 231-239.

65 Annis, S. 1988. "Can small-scale development be large-scale policy?", in *Direct to the Poor: Grassroots Development in Latin America*, edited by S. Annis and P. Hakim. Boulder and London: Lynne Reiner Publishers, pp.210-213. Netherlands Ministry of Foreign Affairs, 1998. *Bangladesh: Evaluation of Netherlands-funded NGOs, 1972-1996*. The Hague: Netherlands Ministry of Foreign Affairs, pp. 53-57. Franke, R. and B. Chasin, 1994. *Kerala: Development through Radical Reform*. New Delhi and San Francisco: Pronilla, and Institute for Food and Development Policy, p. 113.

66 Merrill, T., 1994. *Nicaragua: Country Study*. Federal Research Division, US Library of Congress. http//rs6.loc.gov/cgi-bin/query/r?frd/cstdy@field(DOCID+ni0011; Close, D., 1988. *Nicaragua: Politics, Economics and Society*. London: Pinter Publishers, pp. 2-3.

67 Smith, H., 1994. *Nicaragua: Self-determination and Survival.* London: Pluto Press, p. 42.

68 The Nicaraguan Country Report notes that during the 1980s there were only 114 registered NGOs, but between 1990 and 1997 the number rose to 1615. These NGOs served as channels for about US$ 316 million that flowed into the country.

69 The Contra forces drew support from the US campaign to isolate the Sandinista government and to authorize its overthrow. Between 1981 and 1987 the campaign was highlighted by the US embargo on Nicaraguan goods imposed in 1985 (Merrill, 1994). http://rs6.loc.gov/cgi-bin/query/r?frd/ sctdy@field (DOCID+ni0011.

70 Smith, H., 1994: pp. 250-251.

71 Smith, H., 1994: pp. 18, 42.

72 It is said that by 1990 Nicaraguans were much poorer than they were in 1970 (Merrill, 1994). http//rs6.loc.gov/cgi-bin/query/r?frd/cstdy@field(DOCID+ni0028

73 Albro, R., 1998. "Introduction: A new time and place for Bolivian popular politics", *Ethnology*, 37: 99-115.

74 Netherlands Development Assistance, 1998: p. 21; Merrill, T., 1994. http//rs6.loc.gov/cgibin/ query/r?frd/cstdy@field(DOCID+ni0033.

75 Instituto Universitario Ortega y Gasset. Convenio Andrés Bello, 1998. *La Reforma de la Universidad Pública de Bolivia.* TM editores, Santafé de Bogotá, Colombia, p. 217, as cited in the Bolivian Country Report.

76 RICYT-CYTED-OEA (1999). *Indicadores de Cienca y Technologia 1995–1998.* IESCT/Grupo Redes/Univ. Quilmes, Buenos Aires, Argentina, p.42.

77 Instituto Universitario Ortega y Gasset. Convenio Andrés Bello, 1998. *La Reforma de la Universidad Pública de Bolivia*. TM editores, Santafé de Bogotá, Colombia, p. 218, as cited in the Bolivian Country Report.

78 See the Nicaraguan Country Report.

79 Merrill, T., 1994. http//rs6.loc.gov/cgibin/query/r?frd/cstdy@field(DOCID+ni0036.

80 Hudson, R., 1991. http//rs6.loc.gov/cgi-bin/query/r?frd/cstdy@field(DOCID+b00036.

81 Instituto Universitario Ortega y Gasset. Convenio Andrés Bello. 1998. *La Reforma de la Universidad Pública de Bolivia*. TM editores, Santafé de Bogotá, Colombia, p. 218, as cited in the Bolivian Country Report.

82 The difficulties and the criteria used in selecting the comparator programmes in each country are described in detail in the respective Country Reports.

83 The duration of MMRP-funded projects granted to local applicants, as well as the number of times the same person may apply for and receive support, are controversial issues. For example, PIEB in Bolivia has decided that any person can receive support only once, and this has been pointed out as one of the programme's weaknesses in terms of capacity building of young researchers. REPOA in Tanzania, on the other hand, has been accused of "funding the few winners of the competition over and over" (see the Tanzanian Country Report). All such decisions certainly involve trade-offs, and must be legitimated by and accountable to the local stakeholders. On the other hand, the MMRPs and their projects are encouraged to adopt a long-term development perspective in their research and motivation for it. In that sense, the research has a long-term dimension.

84 KRLPPD in the Centre for Development Studies (CDS), UNDP in CDS, APNLBP in the Institute of Public Enterprises (IPE), FTPP in Centro de Estudios de la Realidad Económica y Social (CERES), PIEB in Sinergia, PRPA in the Grameen Trust, VISED in the Ministry of Science, Technology and the Environment (MOSTE), VNRP in the National Institute for Science and Technology Policy and Strategic Studies at MOSTE, MAP in the Centre for International Rural Development for Asia and the Pacific (CIRDAP); and PIRN in the Consejo de los Pueblos Indígenas de Bolivia (CIDOB, Council of the Indigenous Peoples of Bolivia).

85 This explains the complaints of NGOs in Nicaragua regarding the changing themes and interests of donors, and their corresponding efforts to undertake research in the areas for which funds were available.

86 Kaplan, A., 1999. *The Development of Capacity*. Geneva: UN Non-Governmental Liaison Service, pp. 5-7. The tenacity of these assumptions derives partly from the dominance of the rational, science-based planning or intervention models that underlie the ideologically divergent development perspectives of modernization theory and Marxist-enlightened structuralist political economic analysis. Both positions converge on the view that development and social change emanate "primarily from centres of power in the form of intervention by state or international interests and following some broadly determined development path". See Long, N. and A. Long (eds). 1992. *Battlefields of Knowledge: The Interlocking of Theory and Practice in Social Research and Development*. London: Routledge & Kegan Paul, pp. 18-20.

87 Kaplan (1999: 17).

88 See Long, N. and A. Long (eds), (1992: 21). Long and his associates have advanced actor-oriented approaches as counterpoints to structural analysis. This approach recognizes the central role of human action and consciousness in development. In

the view of the proponents of this approach, intervention ought to be viewed not as the implementation of a plan of action but as "an ongoing transformational process in which different actor interests and struggles are located". An understanding of the processes by which knowledge is negotiated and jointly created and of power dynamics is crucial to the approach (p. 9).

89 Kaplan (1999: 19).

90 Kaplan (1999: 11).

91 Fals Borda, O. and M.A. Rahman, 1991. *Action and Knowledge: Breaking the Monopoly with Participatory Action Research.* New York: Apex Press, p. 12

92 In PAR, the practitioners in an organization or, in the case of the development community, development beneficiaries (e.g. the poor and marginalized) participate actively through the research-action process from project design, on to the implementation of the research conclusions in an action programme or agenda.

93 Manor, J., in collaboration with De Kadt, E., 1990. *Organizing Development Research: Insights for the Netherlands from Four Other Western Countries.* Zoetermeer: Netherlands Ministry of Education and Science. As cited in Boer and Box (1994: 161).

94 Some countries like Nicaragua have highly underdeveloped research and higher education systems. In the region of Las Segovias, where ADESO was established, the word "research" is hardly used, and very few people in the region would call themselves researchers. In India the situation is very different: "There was no lack of researchers to meet these demands, in view of the spread of higher education in the state and sensitization of people, thanks to the state's history of social reforms and political mobilization" (see the Indian Country Report).

95 For a cogent articulation of a mode of research and knowledge production that differs from the traditional disciplinary mode in the way it is produced, "how it is produced, the context in which it is pursued, the way it is organized, the reward system it utilizes and the mechanisms that control the quality of that which is produced", see Gibbons, M. *et al.* 1999. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Society.* London: Sage Publications.

96 Gibbons *et al.* (1999: 23).

97 Interestingly, some academics consider participatory research approaches (PRAs), which have been utilized for process- and development-oriented research, a rigorous research strategy that has expanded the scope of scientific inquiry in fields like agriculture (e.g. farming systems research). As a form of action research, it could produce even more scientific results than conventional social science research because it pursues iterative cycles of thought and action, which have marked successful research in the natural sciences. See, for instance, Whyte, W.F. 1991. *Social Theory for Action: How Individuals and Organizations Learn to Change.* London: Sage Publications, pp. 282-285. Critiquing the ideal research model in the behavioural sciences, Whyte makes a scientific case for participatory action research (PAR). He claims that no other research strategy can match the standard model for rigour in terms of getting the facts straight. For a discussion of action research, see Green-

wood, D. and M. Levin. 1998. *Introduction to Action Research: Social Research for Social Change*. San Francisco: Sage Publications pp. 54-66.

98 Gibbons *et al*. (1999: 5).

99 Other donors have also begun to explore this dimension.

100 De Lange, P. 1995. "Societal direction and utilization of research: Rethinking the role of non-researchers", in *Proceedings of the Workshop on Research Programmes for Development, Arusha, 19-23 June*. DGIS-Funded Research Programmes for Development No. 2, edited by M.S. Bagachwa. The Hague: DGIS, p. 70. De Lange further asserts that epistemic communities ought to be carriers of the knowledge reservoir. Such communities include "all institutes and individuals who carry the knowledge and fulfil the functions essential for its utilization" (p.71).

101 Among the MMRPs, the KRPLLD seems to be most aware of its role in setting up knowledge sites. In its 2000 Annual Report, the programme translated its approach to development into a knowledge perspective. The report liberally cites the World Bank 1998 Report, *Knowledge for Development*, which incorporates the alternative view of knowledge production.

102 Although the country team considers these numbers too low, it is important to bear in mind that ENRECA started in Tanzania in 1994 and the data was obtained in 1999. For comparison, in the United States, it takes an average of seven years to complete a PhD.

103 In addition to the methodologies transferred to the traditional communities, the number of people trained in its courses, and the number of participants in the network, the FTPP is also assessed in terms of number of thesis tutorships it has provided. The results of PIRN projects are assessed in terms of the traditional knowledge recorded and catalogued, e.g. the number of plants collected, and information on the traditional uses of such plants, publications, and the training provided for local people.

104 There is evidence that both programmes have had considerable impacts, despite being short term. VISED was able to train some 400 persons in short-term management courses and produced a significant number of research reports, articles and books that have been used for policy purposes. More importantly, it helped to create a "culture" in which research is seen as important to inform policymaking. MAP is reported to have served the policymakers need for data and information.

105 Three Country Reports (Bangladesh, Tanzania and Uganda) are very critical of the efforts to build the capacity of new researchers in the framework of the MMRPs, and report that no system of mentoring of new researchers by experienced ones has yet been provided.

106 Smith, S. and D. Willms, 1997. *Nurtured by Knowledge: Learning to Do Participatory Action Research*. Ottawa: IDRC, pp. 2-6.

107 Kaplan, A. (1999: 25).

108 See, for instance, Lather, P., 1986. "Issues of validity in openly ideological research: Between a rock and a soft place", *Interchange*, 17: 64-84.

109 VNRP, 2000. "Three country regional workshop of Netherlands-funded programmes". *VNRP Newsletter*, 12: 6, p. 63.

110 The growth and equity debate is not new, but in the discourses emerging in this era of globalization and rapid technological change the terms of the debate are couched differently.

111 Pronk, J., 1989. "Development research never can be neutral: A conference review", in C. Schweigman and U.T. Bosma. *Research and Development: The Role of the Netherlands Cooperation*. Amsterdam: Royal Tropical Institute.