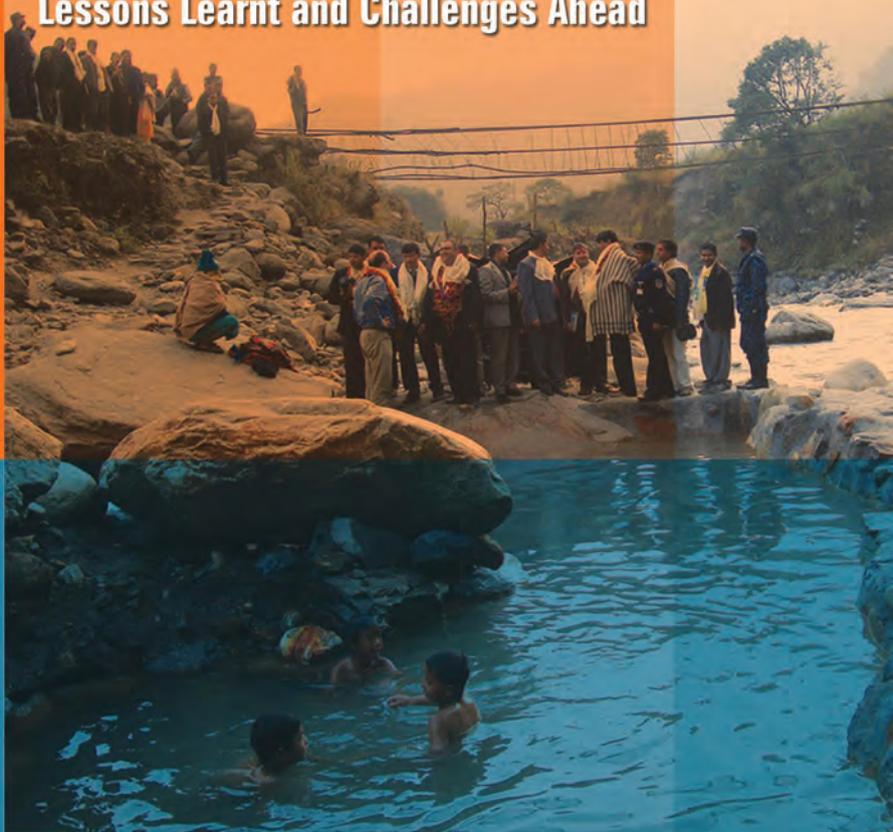


Partnerships in Development-oriented Research

Lessons Learnt and Challenges Ahead



NCCR
north
south

Bishnu Raj Upreti
Anne B. Zimmermann
Berhanu Debele
Guéladio Cissé

with contributions from the
NCCR North-South Regional Coordinators

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Cover photo: Part of the NCCR North-South's transdisciplinary approach to problem-solving: researchers, Nepal's tourism minister, a member of the donor agency, a non-governmental organisation (NGO) representative, tourism entrepreneurs, and local community members discuss how to promote rural tourism opportunities in a sustainable manner in a village in the Western Region of Nepal, within the context of a small, research-based partnership action project (PAMS). [Photo courtesy of Regional Coordination Office (RCO) South Asia]

FOREWORD

This book is essentially the product of South-South cooperation. As such, it is an ideal reflection of what the NCCR North-South set out to achieve when it brought together researchers from diverse regions in the global South at its inception a decade ago. The NCCR North-South sought answers to problems of global change; to help find them it aimed at creating research structures able to deal with the complexity of issues involved in determining successful development policy. Achieving a sustainable improvement in development requires more than just strong will and financial capacity; it also requires knowledge and skills. Knowledge which is both adaptive and solution-oriented can only be developed in cooperation with those it is meant to benefit, making it indispensable to develop research and institutional capacity in the global South.

Has it worked? Has creating a network of research scientists from Bangkok to Abidjan, from Kathmandu to La Paz, from Bishkek to Addis Abeba and Nanyuki brought about the desired results? Not only were the regions geographically diverse: so were the topics of research. Geographers, medical doctors, political scientists, and environmental engineers from the South worked, side-by-side, with their counterparts in Switzerland to tackle the issues obstructing development in countries of the South.

To find out whether research partnerships as practiced by the NCCR North-South were indeed living up to expectations, the eight Regional Coordinators of Asia, Africa, and South America conducted a study. This book presents the results. By and large, it confirms the value of research partnerships as the most viable and cost-effective way of developing research and institutional capacity in the global South. But it also seeks to be self-critical, making suggestions for improvement where necessary.

Research partnerships promote exchange rather than transfer. Mutual learning – in the South as well as the North – is par for the course. Research partnerships are in perfect accord with the goal of establishing a knowledge society in the global South.

While the NCCR North-South as a structure will cease to exist in 2013, we have no doubt that the network of professional and personal relationships built up within it will continue to thrive, in one way or another. Over the years it has become commonplace within the NCCR North-South to see researchers from Tajikistan exchanging information with Ethiopian colleagues on sustainable land management, to combat the erosion common to both countries. Or for researchers from Vietnam and Cameroon – based in Hanoi and Yaoundé – to jointly develop a practical assessment tool for use in planning sustainable sanitation strategies.

It is our sincere hope that support for research partnerships as presented here will continue, and even increase, in future. Working towards developing knowledge societies in the global South will lead us towards the goal of self-determined sustainable development.

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Directors NCCR North-South*

*Thomas Breu
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*Tina Hirschbuehl
Communications Officer NCCR North-South*

Acknowledgements

The idea of examining partnership dynamics emerged during an international training course in Vientiane (Laos) in 2006; it was subsequently discussed within the Regional Coordinators' Forum (RCF) and with the NCCR North-South Management. The Board of Directors (BoD) of the NCCR North-South supported the idea and encouraged the RCF to further develop the idea. It took several months to translate the original idea into a research proposal. The RCF formed a Core Group (CG) to which it delegated the steering role in developing the proposal further. The draft was finalised in Addis Ababa in early 2008. This draft proposal was discussed among the Regional Coordinators and accepted at the following RCF meeting in Costa Rica in 2008. The proposal, entitled "Exploring Partnership Dynamics" (EPD), was submitted to the BoD of the NCCR North-South and the SDC for funding. After approval the research project was formally launched in January 2008.

This book is the collective outcome of three years of effort by the RCF, the Core Group, and associated staffs. North-South research partnership dynamics were assessed by a study team covering nine regions on four continents, coordinated by Prof. Kailash Nath Pyakuryal. Their work is gratefully acknowledged herewith.

We would like to express our heartfelt gratitude to the SDC and the NCCR North-South for funding this study and providing feedbacks and suggestions during the entire period of research and writing of the present publication.

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draft: Dr. Stephan Rist, Dr. Urs Geiser, Dr. Didier Péclard, Dr. Claudia Michel, and Dr. Eva Heim.

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The Authors
2012

Abbreviations

AIT	Asian Institute of Technology
AoW	Advancement of Women
ASAL	Arid and Semi-Arid Lands
BoD	Board of Directors
CAS	Central Asia
CCA	Caribbean and Central America
CDE	Centre for Development and Environment
CETRAD	Centre for Training and Integrated Research in ASAL Development
CSRS	Centre Suisse de Recherches Scientifiques: Swiss Centre for Scientific Research in Côte d'Ivoire
DANIDA	Danish International Development Agency
EAF	East Africa
EPD	Exploring Partnership Dynamics
FSM	Faecal Sludge Management
GDP	Gross Domestic Product
GIS	Geographic Information Systems
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
HUCE	Hanoi University of Civil Engineering
IDRC	International Development Research Centre of Canada
ITC	Integrated Training Course
JACS	Joint Area of Case Studies
KFPE	Commission for Research Partnerships with Developing Countries

NCCR	National Centre of Competence in Research
NGO	Non-Governmental Organisation
NIDS	Nepal Institute of Development Studies
NWFP	North-West Frontier Province
ODA	Official Development Assistance
PAMS	Partnership Actions for Mitigating Syndromes of Global Change
RAB	Regional Advisory Board
RC	Regional Coordinator
RCF	Regional Coordinators' Forum
RCO	Regional Coordination Office
RP	Research Project
RTC	Regional Training Course
SAM	South America
SDC	Swiss Agency for Development and Cooperation
SDPI	Sustainable Development Policy Institute
SEA	Southeast Asia
SNSF	Swiss National Science Foundation
Swiss TPH	Swiss Tropical and Public Health Institute
UNESCO	United Nations Educational, Scientific and Cultural Organisation
£	Pound sterling

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1.1 Do we still need research partnerships and capacity development?

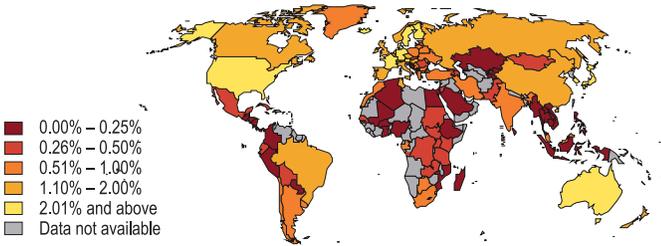
Can it really be true that we still do not know enough to be able to deal with the problems facing our world? It would seem that we do not: we are constantly hearing about complex processes which need more study, such as the interaction between humans and the natural world, or how socio-cultural, economic, and ecological dynamics are affected by the shift from local to global (Urry 2003; Duit et al 2010). Academic specialists, development actors, and policy-makers are all calling for new ways to conduct research; they want to see stakeholders from outside the academic community brought into knowledge production processes and they want this research to cross disciplinary and other boundaries (Lattuca 2002; Mitrany and Stokols 2005; Couzin 2007; Gallastegui and Galarraga 2009). The implication is that we have still not learned to learn from one another and to arrive at more integrated answers together. But what is actually new about collaborating across a multiplicity of borders – and not just political ones, but cognitive, cultural, and academic as well? Have researchers not been doing so for the past 30 years? Indeed, long before the current generation of researchers was on the scene, did our predecessors not do so too?

Some challenges have changed, others persist and are proving just as hard to tackle as before, and while collaboration across borders is not new, it requires constant adaptation. This is our rationale for offering a synthesis of reflections on our practices, achievements, and the lessons we have learned as members of a major long-term development-oriented research programme working in North–South research partnerships.

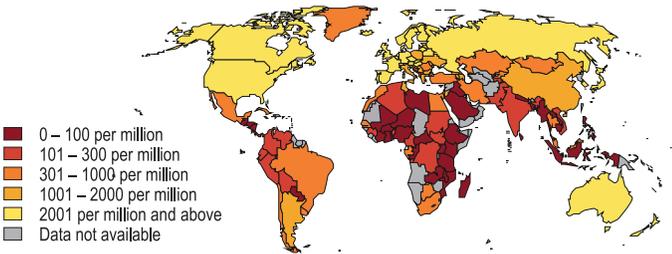
Don't we know enough? Changing challenges: global change is understood today as affecting all aspects of life and all parts of the world. When we have caught one end of the chain of causality, we feel we can unravel the rest and safely explain everything. But global change changes; uncertainty and unpredictability (von Below and Persson 2008; Conway and Waage 2010; Trenberth 2010) unsettle our minds and we tend to respond by reverting to the belief that science and technology should be able to solve all problems. So we do need more research to confront this permanent change and to adapt our solutions. What is more, it is most important that those conducting research should be well grounded in local realities and therefore come from both the global South and the global North.

Where are we going wrong? Persisting problems: many global challenges are still there, despite all the efforts deployed by the international community such as Agenda 21 and the Millennium Development Goals. Can we claim that we are using the Earth more sustainably? Where do we stand today with halving poverty? Is safe water accessible to all? The prospects are rather bleak (MEA 2005; UN 2011). The goal of achieving universal primary education – let alone secondary and tertiary education – will not be met by the target year, 2015. There are still issues that need to be understood and tackled, and researchers have a responsibility here. But how can research contribute to the well-being and further development of humans if well over half of the world's nations have proportionally very few researchers and even fewer research and academic institutions (UNESCO 2011; Figure 1)? And are researchers speaking to society often and clearly enough? These are another two gaps that need to be addressed in future (Conway and Waage 2010).

Gross domestic expenditure on R&D as a percentage of GDP,
2009 or latest available year



Researchers per million inhabitants, 2009 or
latest available year



Source: UNESCO Institute for Statistics, July 2011

Figure 1: *Top*: researchers per million inhabitants; *bottom*: percentage of gross domestic product (GDP) allocated to research and development. (Source: UNESCO Institute for Statistics July 2011 (Factsheet No. 13 [top] and No. 15 [bottom]))

Research partnerships for sustainable development: more research is (still) needed to promote sustainable development. Within the context of global change, research must be conducted both in the North and the South, and by both Northern and Southern researchers (Bradley 2007b; Soete 2008). Since the 1960s, a number of organisations have been concerned with the discrepancy between this need for research and the lack of capacity of the South to produce a strong and independent scientific community (Gyapong 2001; NWO 2006; Bradley 2007b; Hirsch Hadorn et al 2008; Cooper 2010). Meanwhile, in the past 30 years, research partnership programmes have developed as a response to the needs of the donor and science communities. Such programmes have

been set up especially by the Dutch, British, Canadian, and Swiss governments (Bossuyt and Laporte 1994; Gyapong 2001; KFPE 2001; NWO 2006). Research partnerships have been proposed as a means of increasing collaboration between the North and the South, and have often been designed with a strong capacity-development component aimed at helping the South build its own research capacity. The focus of such partnerships has been development-oriented knowledge production (Wiesmann and Hurni 2004; SDC 2007), with increasing attention given to approaches capable of making research particularly relevant to society (Wiesmann et al in press).

How to improve research partnerships: in the past 15 to 20 years or so, much attention has been paid to developing principles for the design and implementation of effective and more equitable research partnerships between the North and the South. These include, for example, the 11 Principles developed by the Swiss Commission for Research Partnerships with Developing Countries, KFPE (KFPE 1998¹). Several studies have focused on assessing the experience of research partnerships and their effectiveness (see the very useful overview in Bradley 2007a; see also: Maselli et al 2004; Sieber and Braunschweig 2005), and have come up with suggestions regarding how to improve the conditions for research partnerships and the ways they are conducted. These efforts notwithstanding, there are still deep inequalities between the North and the South (Johnson and Wilson 2006), and research capacity in the South remains insufficient (UNESCO 2011).

Despite this persisting gap, in Switzerland the priorities of development cooperation with regard to research have recently changed: the funding strategy that explicitly encouraged long-term research partnerships combined with development of academic capacity (SDC 2007:25), with themes and a structure proposed by networks of partners from the North and the South – which

¹ This version of the “KFPE Principles” has gone through extensive revision and consultation in the past few years. A new version of the principles is expected in 2012.

made it possible to launch and operate the 12-year NCCR North-South programme – has now been replaced by another strategy (SDC 2010:4; FDFA 2011). With the aim of developing a more focused research funding policy, the SDC has decided to launch more thematically-driven calls focusing on topical issues for which development cooperation requires immediate solutions. It is no longer possible for a consortium of Southern and Northern institutions to propose a long-term research programme focusing on themes defined by Southern stakeholders, and containing an academic capacity development component. Instead, potential partners can react to thematically focused calls issued periodically by SDC (SDC 2010:4; SDC 2011).

Should development of research capacity in the South really be less of a priority today, we ask? And in the context of global change, is it no longer necessary to support individual and institutional academic capacity? The development of research capacity should surely remain a priority, as the United Nations Educational, Scientific and Cultural Organisation (UNESCO) figures indicate. Moreover, as Conway and Waage (2010) argue, the capacity of Southern societies to tackle phenomena such as climate change impacts, food insecurity, migration, and environmental degradation is still weak and requires further research – which calls for stronger individual and institutional capacity. The existing model of research partnerships with a focus on capacity development is thus still relevant in the context of global change research and development efforts (Bradley 2007a).

Our experience does indeed show that research partnerships can be a successful means of increasing scientific capacity in the South at the same time as developing societally relevant knowledge for dealing with global change issues. The present authors and their colleagues have been working in largely successful research partnerships co-funded for the past ten years by the SDC, the SNSF, and partner institutions, and with another two years ahead of us before completion of the programme. The present publication is

based on a self-assessment of the NCCR North-South programme initiated by the programme's Southern partners in 2006 and entitled "Exploring Partnership Dynamics". In 2008–2009, a survey was conducted of the experiences both of individuals and institutions, including an analysis of the impact of research partnerships on capacity development and on the research–development interface. This was followed in 2010–2011 by a systematic reflection on the factors and processes that have led to successful partnerships.² This endeavour was driven by a desire to analyse and understand what worked well and what could be learned from the NCCR North-South model to date. In this book, we argue that North–South research partnerships focusing on sustainable development and aiming to act as a bridge between research and society are a powerful means of achieving several objectives of major interest to development cooperation and research policy:

- Increasing individual and institutional academic capacity in the South;
- Advancing knowledge about and for sustainable development in a global context;
- Involving stakeholders in certain stages of the knowledge production process to ensure that the results will indeed have an impact on development; and
- Promoting social learning and openness to change.

We are not alone with these arguments, but as we shall illustrate in the coming chapters, the NCCR North-South experience has unique features and provides interesting insights into the dynamics of research partnerships and the conditions for their success. Previous studies have stressed that research partnerships need to

² The study was articulated around three objectives: 1) to examine the effects of NCCR North-South research partnerships on improving the capacities of the partners in the South; 2) to analyse the role of NCCR North-South partnerships in the development agendas of different development agencies in the selected countries; and 3) to identify and document the determinants of the "good practices" which will be useful in designing or shaping future research partnerships.

be examined as processes. Apart from contributing to scientific exchange and producing results, these processes can also enable partners to learn from one another and develop new forms of knowledge production (KFPE 1998; Bradley 2010).

Partnership is a widely debated concept: it can represent collaboration based on equality and mutually beneficial processes and outcomes, but it can also involve highly unequal power relations and one-sided decisions with regard to methods and desired outcomes (Bossuyt and Laporte 1994; Brinkerhoff 2002; Johnson and Wilson 2006). A major challenge of North–South research partnerships is therefore to address unequal relations between partners. Numerous other important observations have been made regarding the way good research partnerships function and the conditions for success. We would like to join in this debate and contribute to it from a mainly Southern perspective, including input from an academic perspective, but also presenting insights from governmental and non-governmental actors who have been our partners in the NCCR North-South partnership regions.

1.2 How we discuss research partnerships in this book

Our analysis is based on ten years of experience with North–South partnerships within the context of the NCCR North-South programme, eight of which (mid-2001 to mid-2009) were assessed in a study entitled “Exploring Partnership Dynamics” (EPD). The EPD study was conducted in 21 countries in Asia, Africa, and Latin America. Data were gathered in a decentralised way through interviews and questionnaires, between June and December 2008. The survey material itself was supplemented by a review of the literature and internal documents, a survey of key informants in the South and the North, and observations made by Regional Coordinators (RCs) in discussions of the EPD project during events when they had an opportunity to meet each other in person.³ In addition, eight out of nine RCs conducted their own regional assessment as part of the study.

³ These events were: the North–South weeks (annual planning meetings taking place in Switzerland), various international training courses, and the meetings of the RCF.

Survey design: the main aim of the EPD study was to help shape more efficient North–South partnerships in order ultimately to contribute to good practices for sustainable development. Table 1 presents an overview of the countries and regions studied in the survey, with the number of individuals and institutions sampled. In discussing the study results, the authors do not claim to make generalised national and regional statements: the low number of persons and institutions surveyed would not even allow us to think of statistical relevance. Rather, we have presented these details to illustrate the diversity of situations and contexts in which NCCR North-South partnerships have been conducted to date.

Table 1: Overview of the countries and regions studied, and number of individuals and institutions sampled

Partnership regions	Countries covered by the studies	Number of individuals sampled	Number of academic institutions sampled	Number of non-academic institutions sampled
1. West Africa	1. Côte d'Ivoire, 2. Mauritania, 3. Burkina Faso	20	5	4
2. East Africa	1. Kenya, 2. Tanzania	8	2	3
3. Horn of Africa	1. Ethiopia, 2. Sudan	12	Nil	2
4. Central Asia	1. Kyrgyzstan, 2. Tajikistan	11	4	3
5. South Asia	1. Nepal, 2. India, 3. Pakistan	13	5	5
6. Southeast Asia	1. Thailand, 2. Vietnam, 3. Lao PDR	7	1	2
7. Caribbean and Central America	1. Costa Rica, 2. Mexico, 3. Honduras	9	4	3
8. South America	1. Bolivia, 2. Argentina	24	4	4
9. Swiss Alps	1. Switzerland	–	–	–
Total = 9 regions	21 countries	104	25	26

Source: EPD survey

Note: The Swiss Alps partnership region was not included in the original quantitative survey, which only covered the Southern partnership regions. It was included only at the stage of conducting interviews with key informants. This partnership region also conducted its own regional analysis.

As one of the aims of the NCCR North-South programme is to enhance the capacity of its partner institutions and to strengthen them, two types of respondents were included in the sample: individuals and institutions. Among the 104 individual respondents from both the South and the North, there were PhD candidates still in the process of completing their degree, PhD graduates (alumni), and senior researchers and post-doc scholars (Figure 2), representing the range of researchers involved in the NCCR’s research partnerships. In addition, 13 seniors from the North occupying management functions were asked to respond to a specially designed open questionnaire containing three comprehensive questions. The institutional respondents were representatives of both academic and non-academic partner institutions. Where possible, at least two academic and two non-academic institutions were sampled in each country. The institutional respondents were or had been involved in NCCR North-South projects, and held responsible positions in their institutions (e.g. head of department or project leader). Data were collected using different unstructured and semi structured questionnaires designed specifically for a) individuals, b) academic institutions, and c) non-academic institutions.

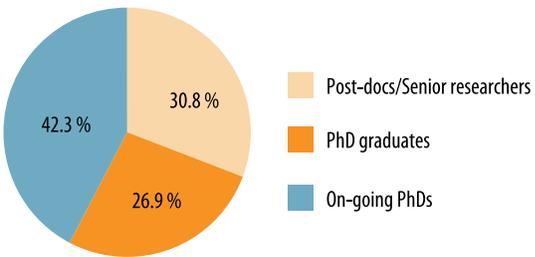
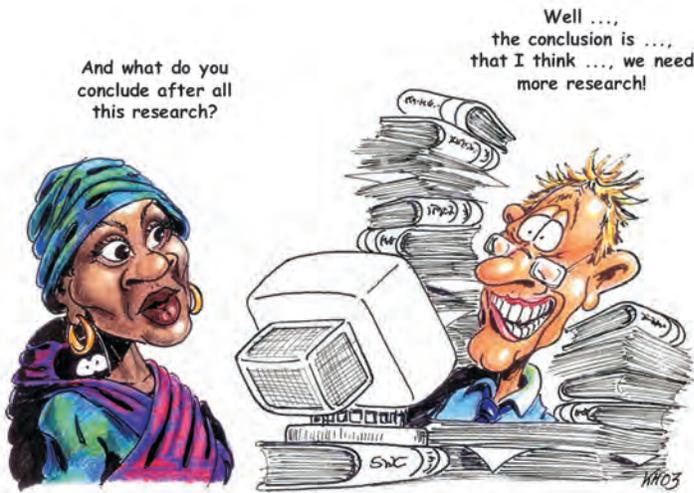


Figure 2: Distribution of academic respondents by level of qualification

Structure of the book: the chapter following this introduction presents the elements and processes that led to increasingly productive research partnerships in the NCCR North-South programme (Chapter 2). In Chapter 3, we focus on the achievements and impact of NCCR North-South research partnerships on the

capacity development of individuals and academic institutions among the Southern partners, with a few contrasting insights from Northern respondents. We then discuss various societal effects of the research partnerships. Chapter 4 presents an analysis of what we consider to be the main factors making for good research partnerships, based on the NCCR North-South's 10-year experience to date. In Chapter 5 we come back to what we consider to be major challenges of research partnerships based on the experiences and lessons learned by NCCR North-South members, and conclude with a brief overview of recommendations regarding how three categories of stakeholders concerned by research partnerships – researchers, development donors, and research funders – can address the challenges of supporting, promoting, and implementing them.



Cartoon: Karl Herweg

Chapter 2

Research Partnerships in the NCCR North-South Programme

2.1 The NCCR North-South set-up in a nutshell

The NCCR North-South was set up to establish foundations for advanced research for sustainable development in the North and in the South. To this end, a partnership network was developed for sustainable development research and studies at graduate and post-graduate levels, linking Switzerland and participating countries around the world. Research in the NCCR North-South programme is conducted by six partner institutions in Switzerland¹ and approximately 140 other partners mainly in the global South (universities, research institutions, and various non-academic organisations in Africa, Asia, and Latin America). The geographical focus of North–South activities is in nine regions worldwide, with RCOs for each of these partnership regions (Figure 3).²

¹ The institutional partners in Switzerland are: Centre for Development and Environment (CDE), University of Bern; swisspeace foundation, Bern and University of Basel; Development Studies Group (DSG), Department of Geography, University of Zurich; Department of Water and Sanitation in Developing Countries (Sandec), Swiss Federal Institute of Aquatic Science and Technology (Eawag), ETH, Zurich; Swiss Tropical and Public Health Institute (Swiss TPH), Basel; The Graduate Institute of International and Development Studies (IHEID), Geneva.

² The RCOs are located in: West Africa RCO at the Centre Suisse de Recherches Scientifiques (CSRS), Abidjan, Côte d’Ivoire; East Africa RCO at the Centre for Training and Integrated Research in ASAL Development (CETRAD), Nanyuki, Kenya; Horn of Africa RCO in Addis Ababa, Ethiopia; Southeast Asia RCO at the Asian Institute of Technology (AIT), Bangkok, Thailand; South Asia RCO in Kathmandu, Nepal; Central Asia RCO at the University of Central Asia (UCA), Bishkek, Kyrgyzstan; South America RCO at Centro de Investigación para el Desarrollo (CIDES), La Paz, Bolivia; Caribbean and Central America RCO at Facultad Latinoamericana en Ciencias Sociales (FLACSO-CR), San José, Costa Rica; and European RCO at CDE, University of Bern, Switzerland.

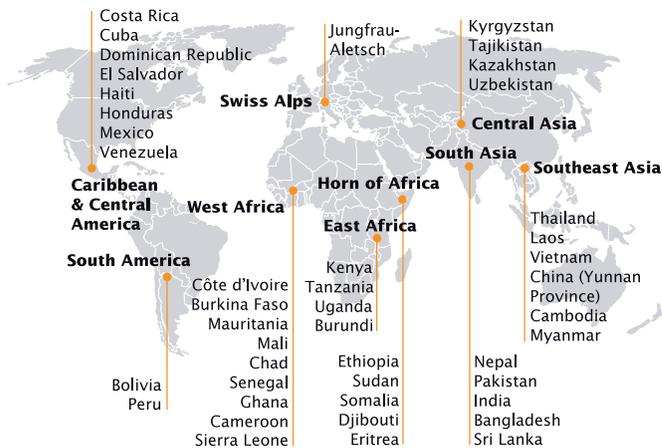


Figure 3: Regions and countries in which NCCR North-South research is being conducted. (Map by Simone Kummer)

By definition, the aim of NCCR North-South research is to contribute to sustainable development. As the promotion of more sustainable development is generally also the aim of development agencies, it is only to be expected that NCCR North-South research should be often closely associated with them and related partners such as NGOs, civil society organisations, and in rare cases businesses. The programme includes close collaboration between development and research, particularly in the programme component entitled Partnership Actions (PAMS).³ It also promotes scientific excellence by supporting the integration of research activities within the larger international scientific network, research collaboration in well-defined project groups, and peer-reviewed publishing. This has justified support from both scientific and development funds for three consecutive programme phases, each

³ Partnership Actions for Mitigating Syndromes (PAMS), commonly referred to as “partnership actions”, are “small participatory projects of limited time and financial scope, designed to ensure that research results are tested for their practical use” (Heim et al 2011:9). The timeframe is usually limited to one year; the scale of implementation ranges from local to global, and research is linked to policy, decision-making, and practice.

lasting four years, and each independently evaluated: the NCCR North-South is co-funded by the SNSF, SDC, and the academic partner institutions.

2.2 Governance issues: from centralised power to delegation

In the first phase of the programme the BoD was composed only of institutional partners from the North, who had sole responsibility for the governance and decision-making of the NCCR North-South programme (SARPI 2000). The main Southern institutional partners did have an indirect influence on decision-making in that they were consulted by Northern partners with whom they had a direct working relationship. But this led to bilateral consultation and meant that Southern interests were represented in the BoD by a specific Northern institutional partner. As a result, themes tended to be dispersed rather than shared.

However, over the years trust between the Northern and Southern partners grew; they reflected on their experience of the power relationship between them and, after consultation with key SNSF and SDC decision-makers, suggested a re-structuring of the BoD for the second phase of the programme. In this new structure, the RCs from the South were included in the BoD; this gave the RCs more scope to reflect on the interests of the Southern partners in BoD decision-making. It also made administration, monitoring, and implementation of the research projects easier. And it helped establish increasingly productive links between the research themes, disciplines, and locations. But only in the third phase was decision-making power – and budgetary authority – truly delegated to the RCs.

2.3 Regional Coordination Offices (RCOs)

NCCR North-South programme activities in the partnership regions are coordinated by nine RCOs. Among the eight Southern RCOs, three are hosted by already well-established research institutions

with a longstanding history of collaboration with Swiss research institutions and with other partners in the global South and North: the CSRS in Abidjan, Côte d'Ivoire, CETRAD in Nanyuki, Kenya, and the AIT in Bangkok, Thailand.

Three other RCOs emerged as a result of NCCR North-South programme activities and are operating under separate legal agreements: the RCO in South Asia is located in Kathmandu, Nepal; the RCO in the Horn of Africa has its office in Addis Ababa, Ethiopia; and the RCO in Central Asia is in Bishkek, Kyrgyzstan, and is now hosted by the newly established University of Central Asia. These three RCOs started as secretariats for contacts, coordination, and logistic support; the on-going support from the NCCR North-South gradually enabled them to emerge as fully autonomous regional offices that are expanding their activities beyond the NCCR North-South programme. This is undoubtedly a major institutional outcome of the programme, as these RCOs have been able to develop sufficient competence and networks to enable them to operate independently as research-related resource centres beyond the lifetime of the programme.

The two RCOs in Latin America are affiliated with local universities in Costa Rica (Caribbean and Central American RCO, hosted by Facultad Latinoamericana en Ciencias Sociales in San José) and Bolivia (Centro de Investigación para el Desarrollo in La Paz). They are well-connected and well-known within Latin America and have links with several Northern countries, but their relations with Swiss university partners have been limited until now. Their current affiliation with the Swiss partners will increase their scope for involvement in a wider range of future research partnerships focusing on sustainable development.

All these RCOs have become more visible in Switzerland as a result of their growth within the NCCR North-South programme. They have been able to provide Swiss development cooperation and policy-makers with research results and other services,

and have been called upon by the SDC and other development organisations seeking thematic insights and connections with local partners. South–South links and collaboration have been another important achievement of the programme: joint research and training activities have emerged between the RCOs. Finally, the RCO in Bern covering the Swiss Alps has hosted research projects launched by Southern researchers.

2.4 A transdisciplinary approach that links research and society

The approach chosen for defining research problems and conducting the research itself is a transdisciplinary one,⁴ with phases of disciplinary, interdisciplinary, and transdisciplinary work (Hurni et al 2004). First of all, academic and other stakeholders, using transdisciplinary communication, jointly explore and define development problems and potentials. This phase looks at so-called “target knowledge”, i.e. knowledge about what the right things might be that need to be done in future and what problems need to be dealt with because they prevent us from doing the right things (Figure 4). The researchers then conduct specialised disciplinary and interdisciplinary research into how systems work (“systems knowledge”). Systems knowledge can also come from non-scientific sources, e.g. traditional knowledge, so it may also require transdisciplinary skills. Finally, the academic and other stakeholders need to get together again to discuss how to do the right thing, i.e. they develop “transformation knowledge”, using transdisciplinary skills that enable joint learning. The process of moving from one type of knowledge and one research approach to another is far from linear: on the contrary, research continuously switches from one to the other and adapts its course on the basis of partial insights and experiences gained along the way.

⁴ Transdisciplinary research has been defined by the NCCR North-South as “research that integrates the social and natural sciences in a common approach, and includes non-scientific knowledge systems in a participatory and interactive process to improve societal practices” (Hurni et al 2004:14)

Knowledge needed for sustainable development

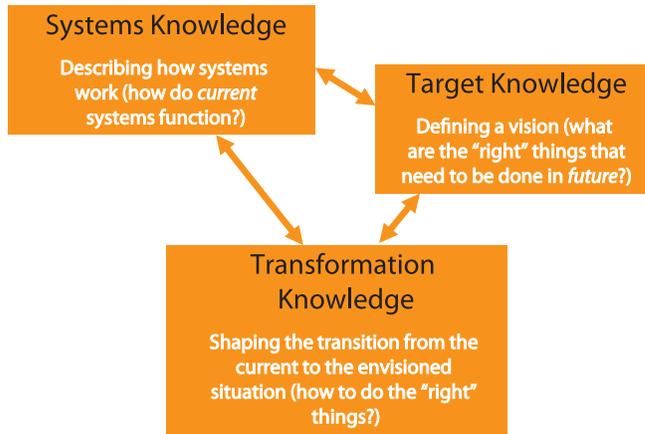


Figure 4: The three types of knowledge needed for sustainable development. (Based on Pohl and Hirsch Hadorn 2007)

This approach was felt to be constraining by some of the research partners at the beginning of NCCR North-South's activities; but in time, all partners realised that it was useful to them because it was open enough to accommodate very different understandings of research for sustainable development. Moreover, the conceptual framework for what was originally called "research on syndromes of global change" (SARPI 2000) was adapted as time went on: the programme left ample space for discussions and revisions of concepts, theoretical and methodological issues, tools, and research procedures.

This does not mean that all members of the NCCR North-South network now have the same understanding of development research. On the contrary, differences have become clearer and complementarities are now visible. Understandings range from the more analytical to the more applied version of development research. As elicited by the EPD survey, whatever their approach, most of the individual respondents said that they are driven by a basic motivation to contribute something that is of relevance to

humanity as a whole and to sustainable development and social justice in particular. They believe that their research should respond to identified needs and that the research results should go beyond the boundary of the merely academic (Zingerli et al 2009).

2.5 Structured thematic plurality

NCCR North-South research focuses on three major areas of activity: a) Research on core problems and syndromes of global change; b) Research on potentials for sustainable development; and c) Research on pathways for mitigating syndromes. Within these three general areas, a number of themes are covered, ranging from the bio-physical to the political sciences.

In the course of its three phases, punctuated by two proposals for continuation approved by a review panel, the organisation of research themes underwent two major changes meant to increase the degree of their interdisciplinary and geographical integration. In the first phase of the programme (mid-2001 to mid-2005), research was conducted in eight individual groups of projects, which corresponded mainly to the areas of research activity in which the Swiss institutional partners and their Southern partners had been engaged before the programme started; though there was some exchange between these eight groups, they worked in a fairly independent manner, simply adding new external partners to join their research projects. In the second phase (mid-2005 to mid-2009), these eight project groups were merged into four work packages to achieve greater thematic integration; in addition, a “Transversal Package” was created to offer post-doc candidates opportunities to submit medium-sized projects on specialised topics, with research activities taking place in at least two partnership regions. The transversal package was also open to members from all research groups who wanted to explore transversal topics such as gender, protected areas, pastoralism, the transdisciplinary approach, and research-based problem mitigation. The overall themes of the four work packages were: 1) Governance and conflict transformation; 2) Livelihood options and globalisation; 3) Health and

environmental sanitation; and 4) Natural resources in sustainable development.

In the third phase – which will continue until mid-2013 – these research themes were rearranged once again within three “nodes”, in order to increase the interaction between institutional and disciplinary partners, with a focus on the following development-relevant themes: 1) Institutions, livelihoods, conflicts, 2) Health, services, planning; and 3) Resources, economy, governance. Transversal themes continue to be examined in projects financed by an integrative node. To date, a total number of 223 PhDs have been supported by the programme, of which 121 have been – or still are – fully funded; though these PhDs have been mainly disciplinary, by institutional necessity, they have been the basis for a number of additional research efforts of integrative nature (Hurni et al 2010; Wiesmann et al in press).



There is a broad understanding that education in the South suffers from under-investment (UN 2011). First and foremost, this concerns primary education – as perceived by the global community and expressed in the 2nd Millennium Development Goal, “Achieve universal primary education”. But tertiary education is also seriously affected, as we mention in the introduction (see Figure 1). Southern countries devote a much lower percentage of their GDP to education, and a much lower percentage of the population gain university degrees. But beyond this, tertiary education and research are also hampered by their poor quality (Conway and Waage 2010; Wilks 2010), an insufficient critical mass of researchers (Nair and Menon 2002), lack of access to data, networks, and publication systems (Britz and Lor 2003; Chan and Costa 2005; Bradley 2007b), and a negative bias of the peer-review system against Southern researchers (Salager-Meyer 2008).

Capacity development – part of a commitment to sustainable development: previous studies suggest that the engagement of donors and research partners in developing the ability of both individuals and institutions to conduct scientific work is a sustainable way of investing in a country’s future, provided it does not lead to a brain drain (Baud 2002:157). This is why the NCCR North-South programme included capacity development at all levels in its overall structural and conceptual framework. We understand capacity development in the context of development-oriented research¹ and define it at three levels. The first level is

¹ The OECD (2006:147) defines capacity development as the “process by which individuals, groups and organisations, institutions and countries develop, enhance and organise their systems, resources and knowledge; all reflected in their abilities, individually and/or collectively, to perform functions, solve problems and achieve objectives”. The NCCR North-South’s practice of capacity development certainly corresponds to this definition.

individual capacity, as this is one of the core building blocks for addressing the challenges of global change. Students and scholars need to master methods and topics; their degrees and activities need to qualify them for high-level jobs; they need to be able to work together and across disciplinary and other boundaries; and they need to be able to transmit their knowledge in a productive way. The second level is the development of institutions' capacity to conduct development-oriented research, train students, develop curricula, influence the scientific community and the national academic landscape, and have an impact on society. The third level is capacity development at the societal level. Within the context of a research programme, this level is harder to define; it is influenced by the inclusion of non-academic stakeholders at various stages of knowledge production, development practice, and policy intervention – something the NCCR North-South has made possible mostly through its partnership action component.

The EPD project surveyed these three aspects of capacity development among NCCR members and their partners; in the following paragraphs, we present an overview of the respondents' reflections on the effects of the research partnerships on:

1. Individual academic capacity;
2. Institutional academic and research capacity; and
3. Societal capacity to move towards more sustainable development.

Interestingly, in their answers the great majority of respondents pointed mainly to achievements and other positive aspects, and only seldom mentioned weaknesses. Criticism of the programme's research partnerships was not voiced in a strong way, and Northern voices were louder in this respect than Southern ones. This is partly because of the questions asked in the questionnaire, which focused more on achievements than failures, but the main reason for the overwhelmingly positive responses from those who participated in the study or who were interviewed is likely to have

been their conviction that research partnerships need funding in order to continue and that negative criticism could dampen donors' willingness to do so. This is not an unusual phenomenon in surveys of this kind (Jones et al 2009).

3.1 Individual academic capacity development

How did individuals see their participation in NCCR North-South activities influencing their ability to conduct and organise their research? The EPD survey and NCCR North-South annual reports reveal a range of interesting observations and facts which we present in separate sections below. However, we would first like to briefly point out the main aspects of the programme's strategy with regard to individual capacity development.

3.1.1 The programme's capacity development strategy for individuals

In the Southern partnership regions, the NCCR North-South invested not only in PhDs but also in Masters. Indeed, in some regions (particularly in Central Asia) it was difficult to find adequately qualified candidates for PhDs; moreover, in the South in general, there was a strong demand for training Masters students and the NCCR North-South supported this. On the other hand, in the case of Northern students, stipends were mostly reserved for PhDs. But the programme strategy was also to increase the number of Southern PhDs, raising the proportion from 50% in the first and second phases to 75% in the third phase. At the individual level, the partnerships have thus provided individuals with Masters² and PhD level academic training. Obtaining Masters and PhD degrees is in itself a great achievement for most individuals in the South. At the same time, Southern senior researchers and post-doctoral scholars engaged in NCCR North-South research developed their capacity to devise evidence-based solutions to problems posed by global change. Finally, as of the second phase, the programme

² However Masters degree holders were not included in the "Exploring Partnership Dynamics" study.

designed work packages explicitly for PhDs who had completed their degree, in order to maintain continuity in some research areas at the same time as offering outstanding scholars an opportunity to continue within the programme.

Apart from providing individuals with stipends, fellowships, and salaries to enable them to conduct academic research – used by the beneficiaries mostly in their own countries in the partnership regions – the NCCR North-South programme has also offered joint training courses. The purpose of these joint courses has been to cover disciplinary and interdisciplinary needs, as well as to introduce participants to the programme’s transdisciplinary approach. Thus, in addition to attending training within their own academic institutions to complete their degrees, students have also benefited from training within the larger NCCR North-South network, where courses have taken place at three levels involving an increasing number and variety of partners (Figure 5).

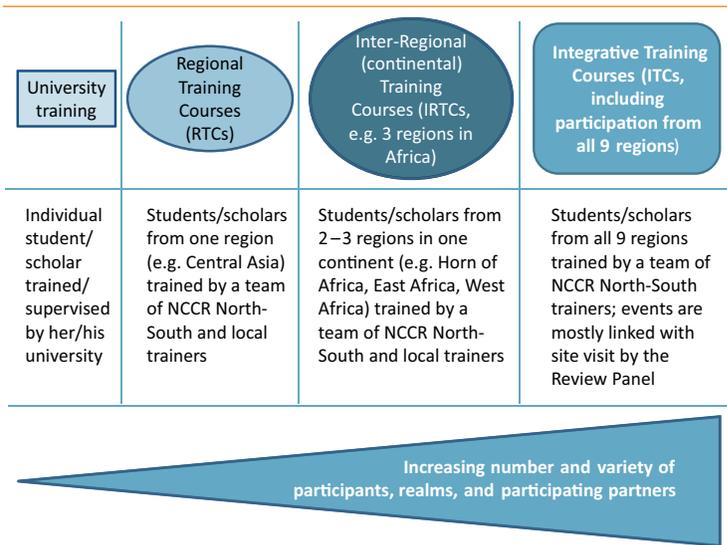


Figure 5: Levels of training in the NCCR North-South programme.

The resulting interaction between partners has been welcomed: “The training courses allowed me to link my research with other

similar research being done in Central America. It also helped me to deepen my knowledge of transdisciplinarity and scientific writing. The training also helped in my PhD research, as I was exposed to new approaches used by partners in other countries” (PhD student). Exposure to completely different disciplines and approaches would not have been possible within people’s own universities, as this is very rarely encouraged (Figure 6). NCCR North-South members have seen this as an important means of opening up to other perspectives of research for sustainable development: “The training courses ... enabled me to meet researchers from different parts of the world, in some cases from different disciplines: engineers, biologists, etc.” (PhD student, social sciences). NCCR North-South training events have generally been perceived by Southern students as extremely useful, although some Northern students have been more critical, saying that too much weight is given to disciplinary methodologies that are already available to them at their own universities.³



Figure 6: During group work at an NCCR North-South Integrated Training Course (ITC) in Ethiopia, participants from four different continents and many different disciplines cross cultural, institutional, and disciplinary boundaries to communicate about development issues that require collaborative research. (Photo: Karl Herweg)

In addition to these training courses, the NCCR North-South management came to realise that there was a need for supporting

³ Self-evaluation has been a standard feature in all ITCs, IRTCs, and Regional Training Courses (RTCs), and one which provides important insights into the immediate effect of training events. The EPD study results confirm the mostly positive results of these evaluations.

supervision in the South, as well as for conducting training sessions of trainers for integrated courses. Consequently, a model of co-supervision was introduced in the second phase, while trainers started being trained as of the third phase – a process which is still continuing, with a view to achieving sufficient capacity in each region to enable them to conduct the different parts of the ITC model developed by the programme.

In the next sections, we present respondents' assessments regarding the following outcomes of individual capacity development:

- Overall academic competence and access to networks;
- Acquisition of funds;
- Publications;
- Job opportunities; and
- Visibility and recognition.

3.1.2 Overall academic competence and access to networks

The vast majority of respondents from the South said that participation in the NCCR North-South programme as individual researchers helped them develop their overall competency as researchers. In particular, they mentioned that attending the ITCs and RTCs gave them an opportunity to expand their networks, broaden their knowledge base, and present their work to peers and senior researchers outside their own academic network; they thus developed their academic competence, knowledge, and skills, and learned to present their specialised knowledge to both peers and seniors in their own field, as well as to people from other disciplines. This led many to venture out into the academic world and attend national and international conferences. Furthermore, the RCs developed their own capacity to organise joint training courses and events. These training modules have since been replicated outside the NCCR North-South.

Participation in meetings, training events, workshops, and conferences, as well as short-term visits to institutions in the North gave the individuals concerned the confidence and competence to

deal with professionals, academics, and policy-makers when they met them at meetings. These events also gave them opportunities to share their research results and conceptual frameworks; they thus improved their ability to analyse the challenges of sustainable development, as well as to participate in various professional networks and contribute to the debates developed by these networks. As a result, a number of individuals came into contact with new networks and offered their services to NGOs, research centres, and development agencies seeking sustainable development experts. As mentioned above, a few PhD graduates were given an opportunity to continue with a post-doc position within the NCCR North-South programme; this has been shown to be an excellent means of individual capacity development, leading some of these former PhD candidates to apply for new grants outside the NCCR and develop their own project proposals.

3.1.3 Acquisition of funds

As a result of such exposure, networking, and training, some NCCR North-South graduates and senior researchers replied that they had been able to obtain more funds for their research and professional advancement. Unfortunately, none of the respondents in the “Exploring Partnership Dynamics” study stated explicitly what funds these were and how much money they received from them. And there is little in the annual reports of the NCCR North-South that illustrates the ability of individuals trained by the programme to acquire new projects independently, although many cases are in fact known.⁴ The reason for the lack of data is that the writers who contribute to the reports face a major difficulty in obtaining the information: once PhDs have earned their degrees and scholars have completed a research project, there is little further contact with them, unless the new graduates apply for a research fellowship or hand in a further project proposal either within the NCCR North-South, or within an institution which

⁴ A Tracer Study aiming to investigate what career paths former NCCR PhDs have followed is currently underway; it will provide far more insight into the impact of the NCCR North-South’s individual capacity building efforts.

happens to be known to the person responsible for reporting back to the management.

Nevertheless, the annual reports (NCCR North-South 2002–2010⁵) have in some cases mentioned additional funding acquired by individuals during their NCCR work or after the completion of their degree. These came from a number of different external sources for the following purposes:

- Funding for research projects involving several researchers (e.g. former doctoral candidates Chinwe Ifejika Speranza and Brama Koné, each of whom successfully applied for climate change related research);
- Additional funding for PAMS (e.g. from the Swiss State Secretariat for Economic Affairs to pilot-test a micro-finance scheme for extending sanitation coverage in Dodoma, Tanzania. This was in connection with a PAMS that aimed to strengthen local communities' resilience through a participatory approach to improve management of human waste in unplanned urban settlements)
- Funding for a number of individual research projects, either earned by MScs applying for a PhD, or by PhDs applying for a post-doc position, or by senior researchers applying for a research mandate;
- Short-term writing or research fellowships at Northern universities;
- Grants for participating in training events and workshops; and
- Travel allowances for attending international conferences, invitations to present papers, or funds for special activities such as peer-mentoring.

⁵ Such data are registered mainly in the Annexes for “Knowledge and Technology Transfer” and “Education/Training and Advancement of Women”.

3.1.4 Publications (scientific and other)

Technical training events provided by the NCCR North-South covering such topics as proposal writing, research methods, sampling, data collection and analysis, academic writing and publishing, communication skills, and reaching non-scientific audiences (policy-makers, development partners, etc.) also had a positive impact on individuals in terms of the quality of their research and, in many cases, of their participation in seminars and conferences and the production of publications. For example, this was the comment of one PhD candidate from Nepal: “Yes, it has had positive effects – academically and in network building. It has made me more mature academically and it has helped me make useful networks, I’ve presented papers in important workshops regarding my area of research.” In an ideal world, training for these skills should be available at the students’ home institutions. However, the overwhelmingly positive responses to the survey question as to whether ITCs and RTCs had been useful and had had any further impact show how important it has been to offer training in standard academic skills. To quote two more specific examples, a male Pakistani researcher and a female Nepalese PhD candidate reported that their capacity to publish in peer-reviewed journals had increased and this had boosted their academic career, which they were now continuing.

In light of the often criticised difficulty faced by Southern authors who try to publish in reputed Northern peer-reviewed journals (Salager-Meyer 2008), these reactions are encouraging. But evidence of the long-term impact of the courses on publication activity has yet to be collected. Indeed, it is only during the past two reporting years that figures for the number of publications by Southern and Northern researchers have been systematically broken down, so it is not yet possible to assess whether the stated improvement of respondents’ writing skills has already led to any significant increase in peer-reviewed and other publications by Southern researchers.

3.1.5 Job opportunities

As already mentioned, the respondents of the questionnaire said that training had proved to be one of the most effective instruments for individual capacity development in the South. The knowledge and skills imparted by NCCR training events to date have helped participants to work confidently in a very competitive academic and research environment, in some cases enabling them to apply for jobs that would not have been accessible to them otherwise: “Due to the NCCR North-South programme, I received international exposure and this exposure gave me an edge over my colleagues” (PhD graduate from Pakistan). In Central Asia, as many as 70% of the PhD students answered that they were promoted because of their degree. For example, a former NCCR North-South PhD from South Asia reported: “Immediately after obtaining my PhD degree I was promoted to Assistant Professor at the University of Agriculture, Faisalabad and also started a post-doctorate within the NCCR North-South.”

Interestingly, Southern PhDs who answered the questionnaire provided mainly positive answers regarding promotion opportunities. In the South, academic degrees – e.g. a PhD – are greatly valued in society because people with such degrees are so scarce; moreover, there is still a great demand for persons qualified enough to join the academic and research setting. This is particularly the case for students who were able to attend trainings offered by North American or European institutions, such as the NCCR North-South. The results of our study have clearly demonstrated the importance of helping to produce well-qualified academic people in the South.

Special provisions within the NCCR North-South programme contributed to improving women’s job opportunities within the programme itself. The call for larger “transversal” research projects with post-doc leadership in Phase 2, for example, made it possible for some female PhD holders to break the glass ceiling in the NCCR North-South programme, previously situated at the

PhD level. This type of project required leaders who were willing to engage in post-doc research being conducted in more than one partnership region, as well as to lead a group of researchers from Masters to PhD level. The aim of these transversal projects was to deal with topics of concern to more than one work package in the NCCR North-South, e.g. social vulnerability and resilience, pastoral production systems, and migration. Women were specifically encouraged to apply and had a high rate of success. Previously, post-PhD projects had involved researchers already holding university positions, who were almost exclusively men. In Phase 3, a similar measure was devised. This time, however, instead of individual leadership, co-leadership involving both Northern and Southern post-docs was required – a very effective means of addressing both the gender and the North–South gap (NCCR North-South Annual Report Year 10:105).⁶

3.1.6 Visibility and recognition

Visibility helps individual researchers to expand recognition of their ability not only within the scientific community but also within society, thereby increasing the likelihood that their research findings will be used in development and policy processes. One of the questions the respondents were asked in relation to the effect of capacity development was therefore about visibility and recognition.

The importance of the NCCR North-South’s training events for increasing research and professional competence has already been pointed out. One Northern PhD graduate mentioned that she can now lead and submit independent research projects, present lectures, supervise students, and apply for visiting fellowships, and that she has published more as a result of her participation in the NCCR North-South research programme. Similarly, a PhD graduate from Nepal mentioned that the degree that he obtained

⁶ The glass ceiling was broken mainly by Northern women in the second phase; the number of Southern female academics in higher positions only began to increase in the third phase of the programme.

had a positive effect on his social status and professional career, not only in the scientific community and professional circles, but also in his village where he was congratulated by the Secretary of the Ministry of Education and Culture in 2007. Recognition has also come in the form of awards for outstanding PhD research, for innovative communication of results to society, and for innovative development projects based on PhD research (listed in the annual reports).

In an overview of the results of the questionnaire related to visibility and recognition, Figure 7 shows that individuals' association with the NCCR North-South was generally beneficial. Overall, 67% felt they had achieved increased visibility and recognition, as a sum of six specific indicators. The indicators that show a higher-than-average result are the following: for 73.9% – the top-rated indicator – this visibility was reported to have led to a higher position. For 71.9%, the NCCR North-South helped them gain more prestige, and 71.3% said that they had been able to publish more. The lower-than-average indicators were invitations for speeches and presentations (64.9%), being more heard than before (63.4%), and – significantly lower – the likelihood of a salary increase (56.7%). It would be interesting to know the reason for the discrepancy illustrated by these results between the number of respondents (71.9%) who reported having obtained a higher position, and the much lower number (only 56.7%) who said participating in the NCCR North-South was likely to have a positive effect on their pay check in future. According to the experience of the RCs, it is very likely that in most cases the NCCR North-South PhD stipend was simply higher than the salary normally paid by a university for an associate professorship in their country, for example.

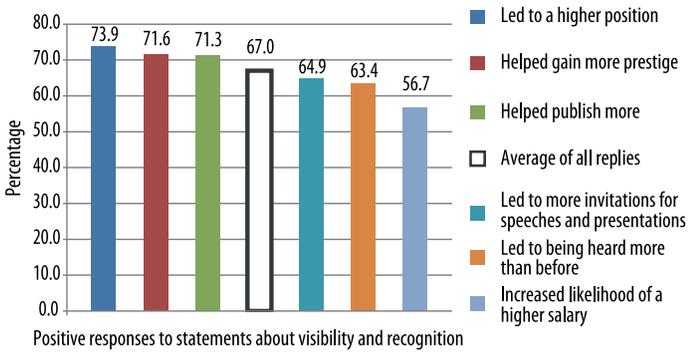


Figure 7: Perceived degree of visibility and recognition at the individual level.

Interestingly, as shown in Table 2, there were regional differences between the answers in the South; not all participants in each Southern partnership region experienced the same degree of professional and intellectual growth. On the one hand, this is because the kind and amount of exposure they received through the partnership is likely to have differed from one region to another, as NCCR North-South projects, partners, and themes differed and led to a variety of ways of implementing the programme locally and regionally. On the other hand, academic, institutional, socio-cultural, and economic conditions vary immensely between regions, leading to very different pre-conditions for individual careers.

Table 2: Regional comparison between statements about the kind of visibility and recognition gained by individuals through the research partnerships (with percentages)

Agreed to the following statement	West Africa (n=19)		East Africa (n=7)		Horn of Africa (n=11)		Central Asia (n=11)		South Asia (n=12)		Southeast Asia (n=7)		Caribbean and Central America (n=9)		South America (n=23)		Overall (n=99)	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
Professional promotion	14	(73.7)	6	(85.7)	6	(60.0)	7	(70.0)	9	(81.8)	5	(83.3)	2	(25.0)	19	(90.5)	68	(73.9)
Gained more prestige	14	(77.8)	5	(83.3)	5	(62.5)	9	(81.8)	6	(66.7)	7	(100.0)	3	(33.3)	14	(70.0)	63	(71.6)
Published more	14	(82.4)	5	(71.4)	6	(60.0)	7	(70.0)	10	(83.3)	5	(71.4)	2	(22.2)	18	(81.4)	67	(71.3)
Invited more often to give speeches and presentations	12	(63.2)	4	(57.1)	8	(72.7)	6	(54.5)	6	(60.0)	7	(100.0)	2	(22.2)	18	(78.3)	63	(64.9)
Heard more often than before	13	(68.4)	5	(83.3)	7	(70.0)	9	(81.8)	8	(80.0)	6	(85.7)	2	(22.2)	9	(42.9)	59	(63.4)
Increased likelihood of higher salary	7	(36.8)	4	(57.1)	7	(70.0)	8	(80.0)	6	(66.7)	4	(57.1)	2	(22.2)	13	(68.4)	51	(56.7)

Source: EPD survey

The strikingly low rate (22.2% – 33.3%) of affirmative responses obtained from those who filled in the questionnaire in the Caribbean and Central America (CCA) requires additional explanation. According to the key informants about this region, Southern members in CCA in the first two phases of the programme were researchers whose reputation and professional career were already well established at the national and regional levels (i.e. in their countries and in Latin America): they already enjoyed good visibility and recognition among their academic peers, the government, the media, and NGOs. This is why they were invited to participate in the programme.

Respondents reported that they had accepted the invitation to participate for two reasons. One was the opportunity to receive funding for their research, which was otherwise scarce (according to the literature, this is often the main reason given for participating in research partnership programmes; see Bradley 2007b: 5, 15, 16). A second reason for participating was the opportunity to broaden their contacts in the Northern academic world.

Apparently, this was not successful in the large majority of cases. The programme did not offer them the space for their own research: the funds were earmarked specifically for PhD projects, which admittedly gave the senior researchers access to supervising activities. While the Latin American senior researchers enjoyed collaboration amongst themselves, they felt uncomfortable with the conceptual framework and common research goals of the NCCR North-South, expressed and discussed in English. As for most of them Spanish is the language used also in their academic work, they were often hampered from participating in the NCCR's intellectual debates for purely linguistic reasons. Furthermore, as development issues are perceived in the region to be mainly power and political issues, not being able to bring in such aspects into the NCCR debate because of the language barrier marginalised them. In addition to this, decisions about project themes, workshop topics, and participation in conferences and other events outside the

programme were made essentially by the main Northern partner. The Southern researchers in CCA thus developed their own niche rather than interacting with other NCCR North-South members working on similar issues. It will be interesting to see whether responses from researchers involved in the current, third phase of the programme will differ in any way. Indeed, efforts to overcome lack of integration and lack of ownership by the Southern partners have been made.

3.2 Development of institutions' academic and research capacity

Investing in the academic skills and careers of individuals is crucial for development in the South; but capacity development efforts will be more sustainable if investments are made in institutions as well (Velho et al 2004:10). This is why the NCCR North-South programme has always included the capacity development of institutions among its overall objectives.⁷ This implies strengthening the ability of institutions to offer networking and to provide a strong basis for continuing research activities and support for development and policy-making beyond the duration of the programme.

3.2.1 The programme's capacity development strategy for institutions

What have been the main aspects of the programme's strategy with regard to institutional capacity development to date? Essential – and inevitable – priorities in the South have included increased access to research equipment, library and data resources, publication options, improved managerial infrastructure, and coaching for institutions. In addition, funding has been allocated to partner institutions for conducting research, hiring assistants, holding training and other events, developing their contacts with stakeholders outside the academic world, elaborating proposals

⁷ See the overview of Phase 2 and Phase 3 Objectives in the NCCR North-South Phase 3 Plan, 01.07.2009–30.06.2013 (NCCR North-South 2010:17–18).

for partnership actions, communicating with the media, and coordinating research activities. Between the first and the third phase of the programme, the institutional partners in the South have been given increasing decision-making power with regard to the specific allocation of funds, giving them greater ownership of programme activities and greater independence with regard to choice of themes and strategies.

But providing access and funds is only one part of the capacity development equation. Far more important are on-going opportunities for coaching and joint learning; research partnerships are an ideal framework for this (Ashman 2001). In the NCCR North-South programme, institutional capacity development has therefore been supported by constant interaction between Northern and Southern partners regarding all matters of importance, from thematic and conceptual matters to strategic and managerial aspects; this focus on communication and collaboration as a key to capacity development has been essential in building trust, confidence, and skills within partner institutions. The true measure of the sustainability of this strategy of capacity development is shown by the increasing extent to which responsibilities have been delegated from North to South, and thus the increasing extent to which power and resources have been shared.

In this respect, regular planning meetings, thematic workshops, and joint training events with field excursions have been organised in all partnership regions and in Switzerland, enabling partners to reflect explicitly about organisational strategies, operational means and principles, and responsibilities. Such workshops and joint training events have also been useful platforms for negotiating the allocation of resources, bridging cultural differences, and fostering intercultural and interdisciplinary alliances. Thanks to the fact that participation in the various training events has brought together a mixture of PhD candidates, Southern and Northern senior researchers, supervisors, and Regional Advisory Board (RAB) members, the institutional learning process has spread to all levels of organisation within the participating institutions.

Over the ten years during which the programme has been in operation to date, specific attention has also been paid to helping institutions develop the skills and capacity required for applying the NCCR North-South's principles: a transdisciplinary approach to research, developing sound PAMS, and elaborating a vision for the future in which academic and other activities will continue. Other ways designed to strengthen the capacity of institutions to continue along the same path even after the programme itself has ended have been assistance in curriculum development, the arrangement of co-supervision of PhD students, and the involvement of senior academic staff in the partner institutions in research and publication activities. In addition, on-going support was offered to selected organisations and persons in the partnership regions, who developed the necessary skills to establish RCOs. These offices aim to develop sufficient autonomy to be able to continue coordinating research partnerships and research projects in the area of sustainable development beyond the lifetime of the programme.

How did the respondents who represented Southern institutional partners in the survey perceive the effect of measures in the NCCR North-South programme designed to promote the capacity development of institutions? Survey findings are presented according to the following indicators, and are complemented by insights from the RCs and information from the annual reports:

- Initiation of new collaborative projects and mobilisation of resources
- Establishment of new academic programmes and curricula
- Integration of interdisciplinary and transdisciplinary research in existing programmes
- Efficient management of research, internal training, and improved supervision
- Visibility and recognition of organisations

3.2.2 Initiation of new collaborative projects and mobilisation of resources

Experience shows that investment in institutional capacity for conducting research for sustainable development in North–South research partnerships has given the partner institutions opportunities to continue developing even after the end of the NCCR programme. For example, in West Africa the Director of the National Research Institute of Public Health in Mauritania, the Director General of the Centre régional pour l’eau potable et l’assainissement in Burkina Faso, and the Director of CSRS mentioned having taken major initiatives for partnerships with the NCCR North-South after their initial involvement in the programme’s activities.

In another example, the CSRS’s involvement in an NCCR research project related to ‘global change and promoting transdisciplinarity’ made it an attractive partner for international global change research networks. The CSRS became an active partner in climate change, ecohealth, and ecosystemic initiatives promoted by other networks. This subsequently enabled the CSRS to apply successfully for a new three-year research project, run with funds from the International Development Research Centre (IDRC). Another successful application for funds within the CSRS was the Afrique One research programme, mentioned by a respondent as the result of trust building and mutual learning gained from NCCR North-South collaboration. This UK£4.7 million project funded by the Wellcome Trust for five years offers post-doc positions to scholars with an excellent PhD degree willing to take up an academic career in their own countries. The scheme covers a network of 11 universities in six countries in West Africa.

In general, the joint development and implementation of research projects with Northern and other Southern partners in the NCCR North-South programme has been an important form of capacity development for a number of additional Southern institutions. There have been several success stories from the various partnership regions; additional examples are given here from Southeast Asia,

South Asia, and East Africa. In Thailand, a collaborative project between the AIT and the Thai Pollution Control Department focusing on technology development and dissemination started within the NCCR North-South and was given long-term prospects through additional funds. In South Asia, the RCO in Kathmandu, as a result of its involvement with the NCCR North-South, teamed up with the University of Toronto and the University of Edinburgh to obtain a research grant for a PhD project from the Social and Humanities Research Council of Canada. In East Africa, long-term collaboration with the NCCR North-South enabled CETRAD to apply for funds from the Volkswagen Foundation for PhD projects related to NCCR North-South research that the programme itself had been unable to fund for lack of resources.

3.2.3 Establishment of new academic programmes and curricula

The information collected from the survey shows that the engagement of institutional partners in interdisciplinary and transdisciplinary research is an important achievement in the area of institution building, as only very few partners practised this type of research before their involvement in the NCCR North-South programme. For example, as a result of the NCCR North-South's long-term engagement in South Asia, Kathmandu University's School of Arts started a PhD programme based on collaboration with various NCCR North-South partners from the North and the South.

In Kenya, the University of Nairobi and Egerton University attracted the participation of other academic programmes in Environmental Studies. In Kyrgyzstan – after initial difficulties encountered at various academic institutions with the NCCR North-South's interdisciplinary and transdisciplinary approach to research, arising from their radically different academic culture – several institutions adopted the programme's approach and modified their programmes. For example, the Institute of Mountain Physiology

shifted the emphasis of its research from a purely natural science approach to the ecology of subsistence and natural resources, which meant decision-makers had to share power and resources.

As a further outcome of their partnerships, the Northern and Southern institutions have been able to integrate different research and training programmes in their organisational strategies for the future. On their own initiative, Southern partners began developing training curricula and modules focusing on the interdisciplinary and transdisciplinary approaches offered by the NCCR North-South programme. Collaborating partner university departments have now institutionalised some of the training courses and conduct them regularly. Competence in transdisciplinary approaches, research methodologies, and interdisciplinary research are some examples of the technical capacities of partner organisations that have been developed over the past ten years. One example of a modified curriculum that evolved in the course of the NCCR North-South programme is a two-credit curriculum on faecal sludge management (FSM) developed for Masters students at Hanoi University of Civil Engineering (HUCE) as a result of the collaboration between a Northern institutional partner (Swiss Federal Institute for Environmental Science and Technology) and two Southern ones, AIT and HUCE.

Each partnership region has designated master trainers for the interdisciplinary and transdisciplinary research approaches developed by the NCCR North-South, as part of a Training of Trainers component developed in the third phase of the programme. These trainers are currently being trained to take over the teaching of modules and the organisation of ITCs and RTCs. Moreover, some RCs have initiated the development of new modules and curricula specifically aimed at bridging the gap between research and society: among the topics and skills covered are stakeholder analysis, working in an insecure environment, and communication with non-academic stakeholders.

3.2.4 Integration of interdisciplinary and transdisciplinary research in existing programmes

In the survey and the interviews, respondents frequently reported that the introduction of transdisciplinary and interdisciplinary concepts and debates facilitated by the research partnerships provided space for the partners to learn about and relate to other research programmes in their own and other work areas. The research partnerships helped partners to engage more with new theories, methodologies, and approaches, and to introduce these in their home institutions. Many academic institutions have started adapting interdisciplinary and transdisciplinary research approaches in their research strategies. For example, in West Africa the main universities collaborating in NCCR North-South partnership research have encouraged the involvement of students and senior researchers in multidisciplinary and transdisciplinary research. The partner universities in the region include: the University of Cocody, the University of Abobo-Adjamé, and the University of Bouaké in Côte d'Ivoire; the University of Nouakchott in Mauritania; the Cheikh Anta Diop University in Senegal; and the University of Ghana.

The institutional respondent from the CSRS said that “the NCCR North-South gave an important opportunity to the CSRS in Côte d'Ivoire and its partners in the region, after several decades of single-discipline research, to increase the number of multidisciplinary and transdisciplinary research projects. In Côte d'Ivoire, CSRS's axis of research 'Urban environment and health', derived from the NCCR North-South programme, has led to a tremendous development of human resources (post-doctorates and engineers), which has been very useful in many cases for the implementation of concrete action-oriented projects.”

Likewise, several universities participating in partnership research from other regions have acknowledged the importance of interdisciplinary and transdisciplinary research in addressing the

challenges of global changes and local problems. Extending training courses to non-NCCR North-South partners has been recognised as a further source of significant institutional capacity development and change with an impact beyond the partner institutions. For example, a Tajik partner from the Soil Research Institute said: "... the Institute's interest in GIS technology has increased in recent times thanks to its collaboration with the programme. Now we are making every effort to shift from manual soil mapping to GIS. The Institute itself is following a new strategy, i.e. the development of soil maps with the help of GIS technology."

It is of no small importance that this adoption of a new approach to the nature of research for sustainable development has also been observed among non-academic partners. One such partner stated: "We used to look at our own problems from a narrowly defined scientific point of view. When we began to discuss our experience with others, and looked at how research problems were approached by the Swiss partners we then began to analyse our problems more deeply than before. We had thought that some decisions would always be taken from outside but then we came to realise that we already had the elements of the decision in the bud which later blossomed thanks to the partnership."

A shift from a technocratic to a transdisciplinary approach has also been observed in a Kyrgyz institute; as one professor commented: "Originally, I was a purely technocratic water specialist, but now thanks to the NCCR North-South support, I have started thinking more and more about the human aspects and how we can now integrate these in our research activities." Another respondent representing a partnership institution from West Africa stated: "We became more aware of the transdisciplinary approach, gained confidence in it, and embraced it, involving other disciplines and relevant segments of society in our project design and implementation in order to tap synergies and enhance our contribution to poverty reduction in the country."

3.2.5 Efficient management of research, internal training, and improved supervision

Enhanced managerial capacity is an important overall indicator of capacity development within the NCCR North-South programme. Enhancing the managerial capacity of a research organisation increases its opportunities for obtaining more research funds, offering regular training to its staff, and developing a number of skills, for example in the efficient use of available resources (e.g. computer facilities and software), the expansion of programme activities (e.g. new courses), and regular financial auditing. The EPD survey therefore inquired specifically about what aspects had been improved in the various institutions.

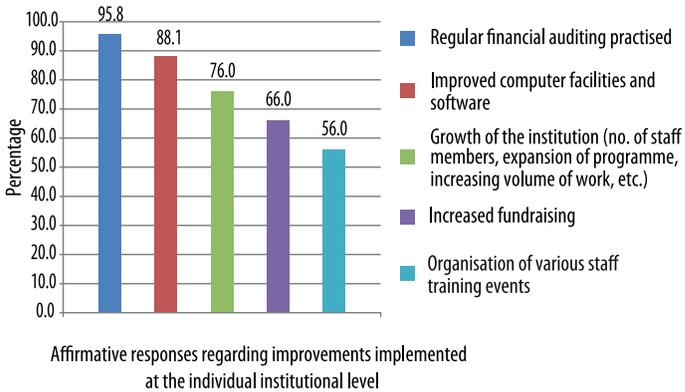


Figure 8: Areas of training and capacity development at the institutional level (Source: Field Survey 2008)

Figure 8 shows that 95.8% of the respondents representing partner organisations said they had had an opportunity to learn how to practise regular financial auditing; 88.1% said that the NCCR North-South had enabled them to improve and upgrade their computer facilities and software; 76% of the organisations had increased their number of staff, expanded their programmes, and increased their volume of work over the years of the programme; 66% increased their levels of funding; and 56% mentioned that

staff training programmes had been organised. In addition, it can be argued that improving people's individual abilities also contributed to the development of the institutions with which they were affiliated, especially in those cases where these people remained with their institutions after completing a PhD or another project funded by the NCCR North-South.

With regard to the replies concerning an increased ability to raise funds, there is one interesting regional deviation from the overall score (66%): all the institutional respondents from Southeast Asia replied that although the NCCR North-South research partnerships contributed to their institutional capacity development in all other aspects, they did not specifically help them to increase their ability to find additional resources. The reason for this was that they were already very well established institutions with good connections to donor agencies even before their association with the NCCR North-South.

Among the ways mentioned as having enabled institutions to improve their efficiency in managing projects were the numerous meetings and joint events organised within the programme. Respondents listed mutual visits, regular discussions, the negotiation of protocols of agreement, workshops, and the interaction between local institutional leaders in the regions and senior visiting Southern and Northern researchers as important triggers for learning. Similar activities also helped to improve mutual understanding among students, senior researchers, PhD supervisors, heads of departments, and dean's offices. This even reached the level of vice chancellors or university presidents, some of whom as a result proved willing to develop further collaboration. Better communication and the development of negotiating skills between the partner institutions in the partnership country, between researchers and research institutions within the partnership region, between the different partnership regions, and between the Northern and Southern partners has helped increase confidence and skills within institutions for securing larger research

grants – one example here being the Afrique One initiative in West Africa. Effective communication is thus a powerful means to improve organisational relationships, strengthen the culture of collaboration, and address resource gaps, especially in the South.

The impact of the NCCR North-South in strengthening institutional capacity – and preventing a brain drain – by producing a large number of academically trained staff is clear to see: most of the researchers reported having been offered jobs either in their home institutions or similar institutions during or after completing their studies. Consequently, the partner institutions now have a greater number of well-qualified staff than before and their efficiency in fundraising or starting new collaborations has been enhanced. The survey results show that professional staff were trained for universities, NGOs, and selected governmental, non-governmental, and international agencies for issues involving interdisciplinary and transdisciplinary research, and linking research with policy and practice.

In the difficult conditions experienced by the Central Asian state of Kyrgyzstan during the lengthy transition following the break-up of the Soviet Union in 1991, when the government stopped subsidising science education, it became vital to support not only young and enthusiastic researchers, but also the institutions themselves. Individual support from the NCCR North-South included not only financial aid in the form of fellowships, payment for fieldwork, support for publications, and salaries for supervisors and experts, but also methodological and conceptual guidance from experts. At the same time, several universities welcomed the offer of institutional support. Before then, only a few scientific programmes in Kyrgyzstan had included the supervision of PhD students. The NCCR North-South partners invited heads of local development organisations and well-known Kyrgyz and other Central Asian scientists for meetings to introduce them to the partnership research projects in the region, which in turn attracted the attention of universities and other organisations. Not only the presidents of several universities but even the then vice-president of

the country realised the interest of a partnership with the scientific programme, since they all shared the objective of strengthening research capacity. As a result, the first collaboration in the region was initiated by signing memorandums of understanding with the Kyrgyz-Russian Slavic University, the International University in Bishkek, and the Kyrgyz Agrarian University.

Also in Central Asia, some partner institutions explicitly mentioned having benefited from the introduction of new technologies, materials, or equipment that helped to initiate new research. This was emphasised, for example, by an academic partner from Tajikistan: “Thanks to the partnership, we now publish articles and issue booklets for farmers. We use the World Overview of Conservation Approaches and Technologies questionnaire for teaching at the Agrarian University. Swiss partners provided us with good cartographical materials through which we have been able to compare the degradation processes that occurred during specific periods of time.”

As already mentioned in the previous section on individual capacity development, one successful innovation of the NCCR North-South was improving the quality of PhD theses in the South through the joint supervision of PhD students by senior researchers from the North and South. The practice of co-supervising PhD students by faculty members from South and North also benefited the institutions themselves, in that university departments in the South and the North learned about their partner institutions, gained a better understanding of their organisational rules, procedures, and cultures, and ultimately broadened their perspectives and skills. The North can thus also be said to have experienced institutional development as a result of collaboration with Southern institutions: institutional development has not been a one-way North-to-South affair by any means.

3.2.6 Visibility and recognition of organisations

As in the case of individual capacity development, visibility and recognition are important indicators of an institution’s

success, indicating successful organisational growth and capacity development. The respondents from the organisations sampled highlighted the fact that the various new institutional arrangements such as PhD programmes, ITCs/RTCs, joint supervision of students, publishing articles in journals and anthologies, producing policy briefs, etc. implemented by their organisations, besides being effective in themselves, were also successful in drawing national and international attention and attracting invitations to work on similar issues in other projects.

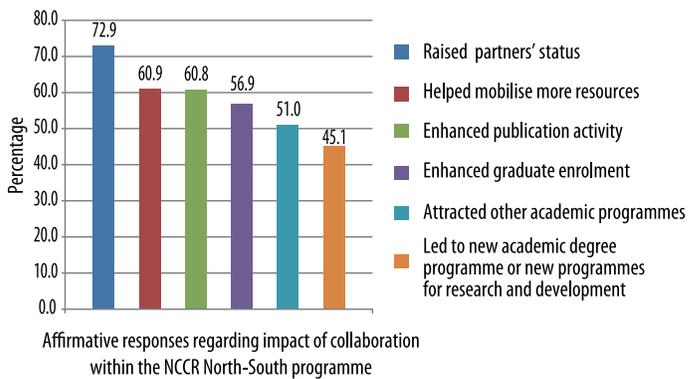


Figure 9: Overview of visibility and recognition at the institutional level

Figure 9 shows respondents' perception of the factors that had enhanced the visibility and recognition of the institutions collaborating with the NCCR North-South. Nearly 73% of respondents said the collaboration had raised the profile of their institution in the South. This was because of the beneficial effect of the partnership with Northern universities in general, the improved quality of the PhD work from co-supervision arrangements, and the improved quality of the scientific publications produced. This is well summed up in the reply received from the head of one of the departments of a collaborating university in Nepal: "This North-South partnership has definitely helped to raise the status of our institution by enhancing the research capabilities of students and faculties." A lower proportion of respondents – 61% – said that

collaboration with the NCCR North-South programme had made it easier to mobilise further human and financial resources. The same percentage responded that the partnership also had a positive influence on the number of publications: indeed, the production of scientific publications is one of the expected outcomes of the partnership. By comparison, fewer than 54% of respondents reported that the introduction of a higher academic degree and new research programmes were currently contributing to enhancing the visibility and recognition of their institution.

When interviewed about the impact of the programme on the institutional profile, the respondents who answered the survey as representatives of partner institutions emphasised that the NCCR North-South programme helped to strengthen the partner institutions on the one hand in the areas of teaching, research, and supervision (in the case of academic institutions), and on the other in the areas of dissemination and implementation of research results. The partner organisations organised numerous training events, workshops, and conferences, and raised the quality of their publications in collaboration with the NCCR North-South. All these activities contributed to enhancing the credibility and organisational profile of the partner institutions in the South.

3.3 Development of societal capacity for sustainable development

Development of societal capacity is mainly the task of development programmes; however, a research programme can complement this aim. Indeed, the goal of all research is, first and foremost, to build up knowledge (Baud 2002), and in the case of the NCCR North-South, the end purpose of this knowledge is to support societies aiming at more sustainable development. This is why one of the four goals of the NCCR North-South programme focuses explicitly on “empowerment”, with the aim of “support[ing] societies in partner countries and institutions in their efforts to address syndromes in their regions and find means to mitigate them”

Box 1: Linking research and development through small projects

NCCR North-South research addresses societal problems by linking research with development practice. The research partnerships and the innovative programme component enabling links to be made between research, policy, and practice through partnership action projects (PAMS) has proved to be one of the most effective means of bringing researchers, practitioners, policy-makers and politicians together.

(NCCR North-South 2010:14).⁸ Before moving to the survey results that looked at the impact of the research partnerships on the development of societal capacity over the first ten years, it is worth briefly evoking the programme’s strategy in this area.

3.3.1 The programme’s societal capacity development strategy

A key element of the NCCR North-South’s strategy to empower societal stakeholders has been the creation of mixed groups with both academic and non-academic members who have met for various purposes, at various stages of the programme’s

implementation. Contact between researchers and stakeholders has been systematically fostered. This began when the programme proposal was first drafted: in 2000–2001 researchers and experts from various governmental and NGOs in the eight planned partnership regions were invited to jointly define a research agenda. Once funding was provided, research leaders were required to keep in touch with societal stakeholders and organise various forms of interaction with them, depending on the kind of research project being implemented. Moreover, the research being carried out had to be relevant to society.

In addition, the PAMS component of the programme enabled researchers and stakeholders to collaborate in testing the validity

⁸ The original formulation of the empowerment goal was more complex in the original programme proposal (SARPI 2000), and shows more explicitly how the programme intended to contribute to societal empowerment through its overall transdisciplinary research approach and its commitment to conducting research for sustainable development: “Through its activities and partnerships, the NCCR North-South will contribute to developing the capabilities of partner institutions and societies at large in developing and transition countries, by strengthening their positions vis-à-vis national and international research communities and network agendas, by introducing state-of-the-art methodologies for addressing syndromes of global change, and by using generic, strategic, adaptive and applied research to help these institutions find sustainable solutions with the means available in their own local contexts” (p.16).

of the results and the proposed innovations, and in improving them. Since the beginning of the programme, the range of activities, issues dealt with, approaches taken, and types and levels of stakeholders involved has been huge. A recent analysis of PAMS conducted in the context of the programme has described their effects on societal development: starting with raising awareness of the need for change, they moved on to encouraging the intention to change, then to supporting the necessary negotiation processes, helping to implement the change, and finally to helping maintain the improvements achieved (Heim et al 2011:21). Change – and therefore an increase in societies’ capacity to move towards sustainable development – has taken place at all levels, from the individual to the national level.

PAMS have generally been implemented in connection with PhD or post-doctorate research activities. For example, in West Africa, 10 PAMS associated with some 20 PhD studies had been successfully completed by the end of the second phase of the NCCR North-South. Often NGOs and community-based organisations collaborated with researchers in implementing PAMS. These projects built on research findings and contributed to the development of particular skills among a range of stakeholders involved in the projects: local people, local to national policy-makers, NGO staff, governmental employees, or development experts. These projects also provided numerous opportunities to establish partnerships with new types of partners.

The programme’s achievements in developing societal capacity were discussed by interviewees and survey respondents in terms of the following criteria:

- Innovative solutions for sustainable development
- Contribution to topical issues in international development
- Training opportunities for non-academics
- Fostering dialogue between research, policy, and practice

3.3.2 Innovative solutions for sustainable development

Some innovative products that developed in the course of interaction between NCCR North-South research partners and societal stakeholders have contributed to successful project planning, implementation, and monitoring at institutional and community levels. For example, a PAMS project called ‘Local Urban Observatory for the Municipal Council of Nakuru’ that was based on a preliminary research project focusing on the rapidly expanding town of Nakuru in Kenya, developed a participatory mapping process, a comprehensive spatial database, and an open access toolkit (NakInfo) to stimulate the development of municipal spatial and environmental planning and management practices. One important aspect was the fact that the tool was accessible to all community members. The toolkit was endorsed by the Association of Local Government Authorities of Kenya for use in other municipalities and was subsequently used by Malindi, Naivasha, and Eldoret municipalities, among others. This product also contributed to the Local Authority Service Delivery Action Planning process at the national level and triggered the establishment of municipal observatories that then fed into the UN-Habitat Global Urban Observatory network.

Another example of a successful innovative PAMS project – described by a respondent in South America as “one of the most outstanding experiences” – is the PAMS on local risk management in Bolivia. Researchers provided scientific evidence on risk factors in an area of the city of La Paz which is undergoing rapid expansion on instable and steep slopes. This information was presented as a basis for discussion, planning, and action with the community members living in the area. Together with residents, workshops were organised to create “vulnerability maps” showing the most important threats and risks in each community, and establish Emergency Operation Centres and contingency plans. In a follow-up of the project, the Foundation for Participative Community Development in Bolivia published a *Threat, Vulnerability, and*

Risk in Bolivia Atlas in association with the South American RCO and Oxfam Great Britain.

Innovative NCCR North-South research findings have also provided significant inputs for policy change – an important driver of capacity development for societies moving towards more sustainable development. Some good examples include:

- East Africa Partnership Region: Transdisciplinary research on drought and semi-arid contexts has had a major and decisive impact on the formulation of Kenyan ASAL development. In addition, long-term involvement of the researchers in promoting negotiation processes in the highland–lowland system of Mt Kenya contributed significantly to the fact that violence did not break out in this region during the crisis time (while in comparable settings the worst incidences of violence were recorded).
- Alps Partnership Region: Transdisciplinary research on the social, economic, and ecological conditions for sustainable development in the Jungfrau-Aletsch area – which has a very complex institutional setting – significantly contributed to a participatory management plan for this World Heritage Site. The plan was recognised by UNESCO as highly innovative and a model for other similar plans.
- Central Asia Partnership Region: Various research projects conducted in mountainous environments and focusing on glacier dynamics, pastoralism, and rural livelihoods contributed significantly to re-focusing attention on marginalised mountain areas in a dare-to-share fair organised by the agencies working with the Central Asian Mountain Partnership Programme. This gave a boost to a wide range of projects in the field of mountain development, risk management, and climate change (e.g. by German Technical Cooperation or by the Global Environmental Facility).

- South America Partnership Region: The integrated research on biodiversity, agro-biodiversity, and related socio-cultural processes conducted in this region has strongly shaped a major project called BioAndes subsequently co-sponsored by SDC.
- South Asia partnership region: The interdisciplinary focus of research on migration, land policy, conflict transformation, and peace building contributed to shaping migration policy, land reform processes, and the peace process in Nepal.

3.3.3 Contribution to topical issues in international development

NCCR North-South research partnerships have demonstrated that they can offer development agencies and policy-makers a great deal in terms of developing local ownership in relation to issues of societal concern. This is achieved through the transdisciplinary approach, which ensures that there is joint planning, monitoring, and implementation of projects based on learning and reflection, mutual respect, and trust (Pohl et al 2010). Often development agencies are criticised for imposing their agenda, approaches, and priorities on the recipient communities (Panday 2009). The NCCR North-South experiences in the South have provided examples of how this can be avoided and how academic research can be made to serve the needs of development agencies – and ultimately of the people.

For example, in Tanzania a PAMS project focused on developing local capacity for the governance of common pool resources in the Rufiji floodplains. Based on research insights previously gained by a group of NCCR North-South researchers, the project implementers facilitated community training and helped establish grassroots institutions (Village Environment Management Committees and Village Natural Resources Scouts Committees) for promoting the sustainable management of resources in the Ngumburuni forest.

The training process and participation in the establishment of the new governance institutions empowered the local communities, who now actively participate in the management of the forest reserve. In particular, the local people successfully negotiated where the forest boundaries should lie, defined revenue targets and investment plans, and elaborated measures to curb misuse of forest resources.

The PAMS project implemented in Baan Klang municipality, Lamphoon province, Thailand, is another example of how an NCCR North-South research-based project contributed to a sustainable solution in an area of current concern to international development, i.e. health and sanitation. FSM in developing countries is known to be major problem. Innovative technological solutions such as constructed wetlands (Figure 10) have been developed but are often difficult to implement.



Figure 10: A constructed wetland on Phi Phi Island, Thailand. Without involving stakeholders, such ecological engineering technologies for FSM are rarely adopted or properly used in developing countries. (Photo: Thammarat Koottatep)

In Baan Klang municipality, the PAMS project aimed to involve a range of stakeholders in defining what factors might lead to more effective sanitation systems. Based on the results of the various stages of the stakeholder involvement process, Baan Klang municipality decided to incorporate some of the coping strategies

the stakeholders had proposed into its development plan for 2009. Moreover, Baan Klang municipality disseminated the lessons learned about FSM to other local authorities facing similar FSM problems. Further insights into coping strategies and appropriate guidance in effective sanitation planning regarding FSM were also disseminated to governmental authorities and academic institutes. Finally, they were shared with other regional partners from China, Sri Lanka, Nepal, Vietnam, Laos, Indonesia, and India at an international symposium on Sustainable FSM in 2008 in Bangkok, co-sponsored by UN-Habitat and the Department of Health, Thailand.

3.3.4 Training opportunities for non-academics

In all the PAMS projects conducted by NCCR North-South researchers and their non-academic partners, a large number of people from all kinds of backgrounds and with different responsibilities were trained or coached while they participated in the projects, where they were key actors. In some cases, however, PAMS projects explicitly included a training or awareness-raising component. This was the case for example in a PAMS in Ethiopia, where community discussions were organised to talk openly about Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome (HIV/AIDS) and identify key factors that make the community vulnerable to infection. In addition, prevention mechanisms were discussed and local people learned about the risk of having multiple sexual partners, the importance of HIV prevention measures, and the use of condoms. Another example is provided by one component of a project aiming to strengthen communication and trust between actors involved in sustainable forest governance in the North-West Frontier Province (NWFP), Pakistan: the villagers learned about forest-related laws and the respective responsibilities of the forest department and the community, and were thus in an empowered position when they participated in the roundtable discussions.

An additional example of how the NCCR North-South programme's transdisciplinary approach contributed to societal

capacity development through the training of non-academics is a “farmer-for-farmer” initiative supported near Guadalajara, Mexico. Importantly, the learning opportunity was not a one-way process: the researchers and farmers involved in the project jointly implemented a training event aiming to inform local farmers about organic farming and fair trade. Because of the transdisciplinary set-up of the project, this training led to an exchange of knowledge between researchers and farmers, and therefore to learning on both sides.

3.3.5 Fostering dialogue between research, policy, and practice

The Syndrome Pre-Synthesis Project (SPSP) workshops held in 2001, prior to the launching of the NCCR North-South programme, are an example of how the dialogue between research, policy, and practice was fostered from the beginning. The academic and non-academic experts invited to these workshops discussed a preparatory list of core problems and debated whether additional or different issues needed to be taken up, according to the knowledge and experience available about the region. The workshops played a crucial role as a platform for open deliberations, negotiations, and team building with a view to the implementation of the research projects that would emerge in the NCCR North-South programme; moreover, the non-academic experts involved in the workshops remained an important channel of information between the researchers and society once the projects were launched. Defining the research agenda together was thus an important contribution towards societal capacity development.

As hubs for researchers, policy-makers, and development practitioners, RCOs organise development- and policy-oriented research and ensure that the results are disseminated. They have also been instrumental in facilitating the dialogue between research and society on a number of occasions, including ITCs organised by them at a regional or continental level. To mention just one recent example, on the occasion of a field trip organised during an Asian

ITC in Kathmandu, students and senior researchers from Nepal, Pakistan, India, Thailand, Laos, Kyrgyzstan, and Tajikistan met municipal representatives of the city of Bhaktapur, a UNESCO World Heritage Site governed by a municipality that is trying to curb the uncontrolled expansion of new houses in valuable agricultural land by organising and pooling (Figure 11).



Figure 11: Transdisciplinary work in Simen National Park, Ethiopia. (Photo: Kaspar Hurni)

A further example of how an NCCR North-South research partnership has fostered the dialogue between research, policy, and practice from the local to the national level comes from Kenya, where the following high-level public institutions have collaborated with the researchers and the local communities to find sustainable solutions for the burning issue of the increasing scarcity of water in the Ewaso Ngiro Basin: the Ministry of Water and Irrigation, the Ministry of Agriculture, the Water Resources Management Authority, the Ewaso Ngiro North River Development Authority, the Ministry of Livestock Development and Fisheries, and the Kenya Dairy (Kiteme and Gikonyo 2002).

PAMS have been relevant to societal actors, as reported by many survey respondents. For example, one NGO respondent said: “With the PAMS project, we received a real picture of what our farmers’ expectations are and a forum through which the voice of the rural people is reached and heard. [...] The involvement of the specialists, local people, and policy-makers gave us a comprehensive picture, making the decision-making process much easier than before.” Or a representative of the Foundation for Participative Community Development, a partner organisation in South America, reported: “We do indeed work with the Planning Ministry in the elaboration of planning methodologies and in territorial management. We also work with the Ministry of Civil Defence in the elaboration of emergency protocols incorporating risk management. Also, at the local level, we work with several municipalities on the topic of decentralisation processes and risk management. We became involved with these policies on our own initiative, but the NCCR North-South has complemented our efforts with the theoretical part.”

The PAMS in Pakistan mentioned in the previous section, implemented by the Sustainable Development Policy Institute (SDPI) with its local partners, highlights the importance of a neutral proactive platform to ensure that the results of the research are successfully disseminated. In the NWFP, the relationship between the state and local stakeholders regarding forests is typically one of conflict. The joint forest management procedures applied by donors have come up against enormous difficulties – mainly because under this arrangement stakeholder dialogues are controlled by the State Forest Department. This project was therefore implemented to test the feasibility of creating stakeholder platforms moderated by independent persons and in which the state would be only one participant out of many. As a result, a monthly information bulletin called the *Pakistan Forest Digest* was launched, which became instrumental in linking research, policy, and practice.

At the individual as well as at the institutional level a lot is being done to disseminate the research findings and spread them as widely as possible. The researchers publish widely and in various forms (e.g. peer-reviewed journals, books, magazines, newspapers, open access online material, manuals, and videos), organise meetings and seminars, and invite high-ranking government officials as well as local authorities, private entrepreneurs, and civil society organisations to attend workshops and presentations. They collaborate with public agencies to revise laws and to offer training. Selected researchers represent their institutions in national or international policy-drafting commissions. Overall, all these activities help to enlarge the network beyond the academic sphere and to contribute to on-going processes in the arena of development policy as well as in national, mostly public, contexts. Often knowledge sharing beyond the academic realm is realised through good personal contacts with trusted people engaged in either policy or practice. The fact that people matter in this regard is also reflected in the accounts of some of the individual respondents who have experienced indifference or even strong prejudice towards scientific, development-oriented results. In such cases it is not possible to engage in a constructive dialogue with actors from the areas of either practice or policy.

3.4 Negative experiences in relation to capacity development

As already mentioned, very few survey respondents and interviewees provided negative feedback on their experience of NCCR North-South research partnerships. Where there was negative feedback, it related to PhD procedures, supervision conflicts, pressure to publish, financial autonomy, and the programme's conceptual framework. Initially, some partners disagreed with the NCCR North-South's research framework. They criticised the fact that the syndrome concept was somehow misleading, because syndromes are linked with the medical sciences. Moreover, the framework seemed to focus too heavily on problems rather than potentials, and conflicted with their understanding of sustainable development.

With regard to PhDs, the NCCR North-South PhD selection procedure was considered problematical by some, as they experienced a long time lag between handing in their proposal and receiving the go-ahead. In addition, the administrative – and in some cases academic – requirements of local universities substantially complicated matters for the students. Indeed, supervisors in the North and the South sometimes had incompatible interests and perspectives. For example, in West Africa, one of the new PhD students of Phase 2 stated that he faced a problem as a result of his Northern and Southern supervisors' contradictory choices about the direction his thesis should take. His supervisor from the North wanted the study to explore particular issues while the supervisor from the South found those issues too risky for the student in the political context of the country.

The following problems were also reported by PhD students in West Africa relating to their supervisors (both from the North and the South):

- Difficulty in reconciling the Northern supervisors' objectives and those defined by academic supervisors in the South;
- Replacement of the academic supervisor in the North, leading to changes in the focus and methods of the research;
- Advice from the Northern supervisor can sometimes be very difficult to follow in the environment in which the student is involved;
- The Southern supervisors lack time, which makes it difficult to arrange meetings;
- Some supervisors involve their assistants in the supervision, which creates more difficulties for the students than if they could work directly under the supervisors themselves;

- Sometimes it takes a long time for the thesis to be defended because the academic reviewers fail to return it soon enough.

Similar difficulties were mentioned by students from other regions as well.

Another issue mentioned by several respondents and confirmed by some RCs was the pressure from the NCCR North-South to publish in high-impact peer-reviewed journals. On the one hand, access to such journals was experienced as difficult, partly for financial reasons (high subscription prices) but also because of the lack of experience with submitting articles to such journals. On the other hand, publishing in Northern journals is very time-consuming; the demand for such work was said to conflict with institutional factors such as a high teaching requirement, lower recognition in Southern institutions for such publications, and the emphasis attached by Southern institutions to ensuring links with policy and practice. As mentioned above, the researchers do in fact publish widely, but often in publications aimed at a broader public.

The inequality between institutional partners with respect to financial resources was mentioned by several respondents. They felt that when it came to financial issues, there was still a tremendous asymmetry in research partnerships. Indeed, until the middle of the programme's second phase, the North–South relationship was heavily tilted towards the North: decisions regarding allocation of resources were largely made by the Northern partners. There were some differences between the way in which individual institutional partners from the North treated their respective regions; this had direct implications on institutional processes and the RCOs therefore developed in different ways. But with the preparations for the programme's third phase and the decision to hand over responsibility for thematic and institutional decisions to the RCOs, this situation changed completely.

3.5 Conclusion

In her extensive and insightful review of the literature on North–South partnerships, Megan Bradley points out that “[c]apacity building opportunities for Northern and Southern researchers and institutions are an essential aspect of many if not most partnerships” (2007a:29). She also mentions that “[c]apacity building is a crosscutting theme in much of the literature” she discusses. As illustrated in this chapter, the EPD survey respondents have provided ample evidence that they consider individual, institutional, and societal capacity development as a major – and necessary – achievement of the NCCR North-South programme to date. And as argued initially in this chapter, support for capacity development of this kind remains an urgent priority.

Indeed, individual and institutional capacity is a precondition for scientific innovation, which is crucial for moving towards more sustainable development (Conway and Waage 2010). Establishing an intricate relationship between innovation and development is essential to address issues of sustainability because the innovations – not only technological but also social, cultural, and economic ones – provide options for achieving the objectives of sustainable development (Johnson and Wilson 2006; Conway and Waage 2010). Therefore connecting research with development practice and policy is the essence of development-oriented research. Such research can only be accomplished if a critical mass of competent and capable researchers and research institutions is developed in the South.

After eight years of experience with individual, institutional, and societal capacity development, NCCR North-South research partners reflected that they were able to mobilise more funding and other resources, as well as to develop new collaborative research projects, both at the institutional and at the individual level. They also gave examples of institutions initiating new

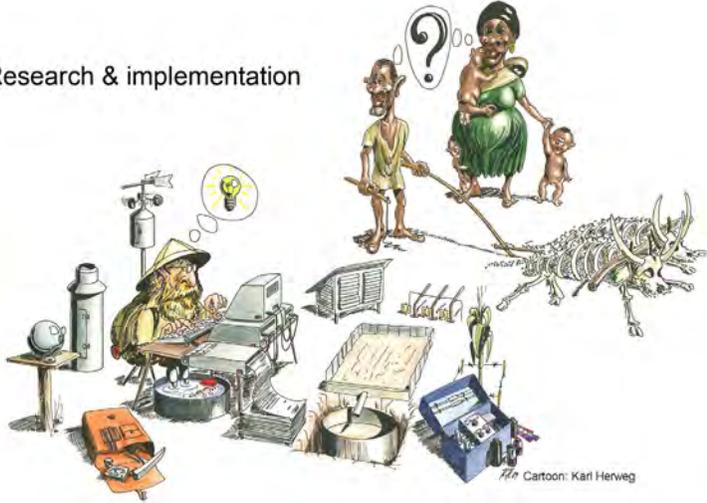
academic programmes, or adapting existing ones and incorporating interdisciplinary and transdisciplinary approaches in their research and teaching. The number of graduate students was shown to have increased, and institutions and individuals were said to be more recognised by important stakeholders such as governmental, non-governmental, and donor organisations, the media, and civil society groups.

Indeed, the analysis of qualitative information indicates that after entering into NCCR North-South partnerships, Southern partner organisations became more aware, gained confidence, and gave greater priority to transdisciplinary issues. This encouraged other disciplines and projects to tap synergies among themselves and achieve more coordinated outcomes. The attitude of scientists changed from looking at a problem from the viewpoint of a single discipline to the practice of interdisciplinary and transdisciplinary research. In some regions, changes were noticed in the areas of development cooperation, women's empowerment, empowerment of the rural poor, conflict mitigation, and more sustainable natural resource management. Under the arrangement of NCCR North-South partnerships, several employees of the partner institutions were trained to develop their ability to conduct meaningful research needed for designing appropriate policies responding to development challenges. Other respondents reported that their involvement with the NCCR North-South encouraged other partner organisations to engage in stakeholder dialogues, a relatively new concept for many.

While the relevance of institutional strengthening is crucial for the South, it is also beneficial for the Northern research partners. Apart from being able to rely on more efficient and effective Southern research institutions, the partners in the North benefit as well by having access to a well-supported network and context for applying their interdisciplinary and transdisciplinary research, testing their theories, and further developing their approaches with

Southern partners. The findings of this study largely show that minimising the gap between the North and the South is possible when emphasis is placed on the capacity development of the Southern partners and promoting mutual respect and collective decision-making.

Research & implementation



Taking stock and learning from experience has been an inherent principle in the functioning of the NCCR North-South programme to date; the survey initiated by the RCF and conducted mainly in the Southern partnership regions is no exception, one of its aims being to identify good practices. In our analysis of the results of this survey and of the subsequent interviews with leading programme members, we identified what were the most important factors that made the research partnerships in the NCCR North-South programme function well; the following list of enabling factors emerged from this analysis:

1. A willingness and capacity to deal with power issues;
2. A judicious choice of partners;
3. Sufficient resources to develop capacity where necessary;
4. A commitment of research partners and development cooperation agencies to engage with one another;
5. A transdisciplinary approach for connecting research and society;
6. The creation of stable regional bodies; and
7. Common guidelines and procedures.

In this chapter, we present these seven enabling factors, illustrate them with survey findings, and briefly discuss them within the context of the literature on North–South partnerships where appropriate. These seven factors are characteristic of the NCCR North-South’s experience and overall objectives, and they depend on underlying principles that were repeatedly mentioned by the respondents and interviewees: mutual trust, commitment,

collective efforts and ownership, building on experience, dealing with power issues to minimise the North–South gap, long-term engagement, sufficient financial resources, and equitable and effective use of these resources. This list of principles is certainly quite similar to the 11 KFPE Principles (KFPE 1998). This comes as no surprise since the KFPE Principles were explicitly addressed both in designing and establishing the programme, and in the EPD survey itself (see Chapter 4.7).

While other studies of North–South collaborative research have come to fairly similar conclusions regarding the principles that make for good partnerships, they also single out a number of other factors that make partnerships work. These differences are due, on the one hand, to the different focus of each study, and on the other to the kind of research partnerships investigated and the aim and perspective of each study. Thus, Bradley (2007a) shows that the studies she reviewed stressed motivation, ethics, and politics, embedding partnerships in national institutions, building on sectoral experiences and researchers’ capabilities as being important enabling factors. In the context of Dutch North–South research partnerships, Soete (2008:9) identifies “research ‘diversion’, i.e. the redirection of research activities, nationally funded but with an international focus, towards European research issues” as a negative factor, while he considers acknowledgement of the ‘endogenous’ nature of innovation, broadening the scope of research activities, and a demand-led research agenda to be enabling factors. The Netherlands Organisation for Scientific Research (NWO 2006) identifies funding thematic research programmes (e.g. UN Millennium Development Goals) and frontier research projects, the generation of new insights and knowledge about development issues, open competition, emphasis on coordination, joint priority setting, and interaction between researchers and stakeholders as key factors that make partnerships work. Similar observations have been reported by other studies (Blagescu and Young 2005; Conway and Waage 2010).

The variety of enabling factors identified by the different studies makes it difficult to compare our results with the literature in a systematic way. Rather than attempting to produce an overall framework which would cover all the observations in the literature about factors enabling research partnerships, we therefore only deal with those points where our own analysis and that of other authors are similar.¹

4.1 Willingness and capacity to deal with power issues

Power issues cannot be evaded in a North–South context, nor should they be neatly covered up by an ideal image of partnerships as the means of overcoming deep-seated, historically ingrained inequalities. Even when collaboration between Southern and Northern partners is functioning at its best, inequalities exist and need to be addressed. Power is involved in all aspects of research partnerships: from setting the themes to be dealt with, to allocation of resources, ownership, and sharing outcomes (Bradley 2007b; Soete 2008; Bradley 2010; Conway and Waage 2010).

The experience of research partnerships in the NCCR North-South shows that if this principle is well understood by the partners and if measures exist to deal with power issues, members will not resent inherent inequalities. As a result, they will be able to negotiate better arrangements, to the benefit of all partners and of the research they conduct together. Several measures were highlighted by survey respondents as conducive to dealing with power issues and leading to greater equality between the Northern and Southern partners, of which two seemed particularly relevant: delegation of power (including budgetary authority) and the long-term perspective of a twelve-year programme.

¹ For an overview of the practices and policies of the main Northern agencies that promote research partnerships, see Blagescu and Young (2005). They introduce their overview with the following comment: “Partnership guidelines and policies comprise three critical aspects: the ethical, the substantive and the procedural. [...] While organisations have clear policies on the substantive and procedural aspects to guide their individual activities/projects and those activities take place in partnership, ethical policies and guidelines for partnerships are not so explicit” (p. 8).

4.1.1 Adaptation of the governance structure to delegate decision-making power

In the course of the first two phases of the programme, the Southern partners were increasingly involved in decision-making processes. Both the partnership framework and the goal of producing knowledge for sustainable development – which requires a collaborative and transdisciplinary approach – were instrumental in enabling the shift of responsibilities from Northern partners to an increasing number of Southern partners. Representation of the RCs in the NCCR North-South BoD was a major step in this respect (see also Chapter 2). It took place in two stages, the first being the inclusion of the RCs in BoD meetings and BoD decisions in Phase 2, leading to budgetary autonomy in the third phase.

In addition, when the third phase of the programme was designed, Southern researchers were invited to apply for co-leadership with Northern researchers in two new components of the programme: Research Projects (RPs)² and Special Research Projects³. Southern project leaders have also participated in the annual site visits (external evaluations of the programme), presenting the progress of their projects in collaboration with their Northern partners. This has been perceived as another major step towards bridging the North–South gap.

4.1.2 Long-term engagement

Not surprisingly, the willingness and ability of all partners to engage with such difficult issues as sharing decision-making power, accountability for financial resources, and responsibility for thematic choices seems to have been helped by the long-term engagement of the donors and the partners. Indeed, in all assessments of research partnerships, long-term engagement is

² The RPs are flagship projects in the third phase: 15 RPs with linked PhDs were allocated after a call for proposals. These projects are jointly managed by at least 2 co-leaders, one from the South and one from the North. In some cases both co-leaders are from the South.

³ The five Special Research Projects (SRPs) are global projects synthesising NCCR North-South research on contemporary issues (migration, food, water, land) conducted in the first two phases.

pointed out as a crucial factor enabling partners to deal with power issues, as well as with other challenges that emerge in research partnerships (NWO 2006; Bradley 2007a; Bradley 2007b; Soete 2008).

The survey results show that the temporal dimension was a crucial element in implementing the partnership process: the long-term perspective offered very positive conditions. It gave partners the necessary time to build rapport and create ownership; the time to bridge cultural differences and build inter-cultural alliances; the time to create and adapt structures; the time to invest in and consolidate capacity at institutional and individual levels, especially in the South; the time to establish and strengthen a South–South network; the time to test innovations in collaboration with social and societal actors; and the time to engage in a search for follow-up structures.

4.2 Judicious choice of partners

In partnership research the choice of partners is an important determinant of success or failure (see Bossuyt and Laporte 1994; Johnson and Wilson 2006). Partnership research requires collective commitment to common objectives guided by the broader mission (i.e. in the case of the NCCR North-South, contributing to sustainable development and linking research and society), as well as willingness on the part of the stakeholders (research partners, research donors, and policy- and decision-makers) to support the development of competency for sustainable development. For individuals and institutions with such a variety of organisational cultures, operational procedures, and value systems, it is quite a challenge to work together. Thus, the judicious selection of partners was an important first step in ensuring the research partnerships could become operational.

The survey inquired into institutional partners' reasons for choosing to partner. The results offer an interesting picture (Figure 12), discussed in the sections below.

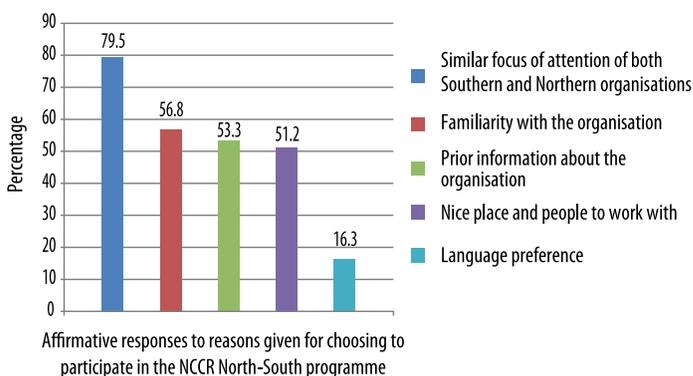


Figure 12: Factors that influenced the choice of partners

4.2.1 Similarity of focus

One of the important factors determining the choice of partnership, according to senior respondents involved in the programme from the beginning, was that the Northern and Southern partner organisations should have a similar focus of attention. This comes as no surprise and is confirmed by a decade of experience with partnership research. For example, some partners specialised in certain themes (e.g. environmental sanitation) and geographical areas (e.g. Southeast Asia). They preferred to concentrate on familiar issues and areas instead of choosing new themes. The main reasons given were better networks, continuity on the same issues, and working with the same persons. In the case of East Africa, for example, the partnership was built on a long-term institutional network developed by the host institution, CETRAD. At the time the NCCR North-South activities started, a number of research, training, and regional and national development institutions interested in arid land development got together and formed the network that supported the implementation of CETRAD's activities.

Both the history of how new partnerships emerged beyond the original ones, and the answers of some of the survey respondents,

indicate that involvement in a new partnership is usually based on thematic opportunities within the overall partnership network. But the process of developing a new research partnership is a gradual one; confidence-building takes time and requires commitment from both sides. Once the partners know each other better, they start expanding their common research activities. One example is the engagement of Swisspeace in conflict issues in South Asia, which started only in the second phase of the NCCR North-South research programme, at the request of the South Asian RCO; another is Sandec's involvement in Central America, at the invitation of the Caribbean and Central American RCO, which had defined a new research priority for the region, namely sanitation issues in urban contexts.

4.2.2 Familiarity and previous engagement with the research partners

The EPD study also found that familiarity between the research partners and previous involvement with them in research activities was the second most important reason for choosing a particular partner. Indeed, before the NCCR North-South was launched, those in charge of formulating the proposal opted to select partners in the South with whom the Northern researchers and their institutions had previously worked. A “pre-synthesis workshop” conducted in each of the planned partnership regions identified potential partners (Hurni et al 2004) for collaboration in the NCCR North-South research programme, most of whom were familiar with each other. Respondents to the survey stressed that the main reason for engaging in a partnership with familiar people and institutions was to minimise the risk of failure. This confirms what other studies (Brinkerhoff 2002; Blagescu and Young 2005; Johnson and Wilson 2006) have highlighted: familiarity, engagement, and previous long-term collaboration will develop more easily into trust and mutual understanding among the partners – essential components of successful partnerships.

4.2.3 Choice of place and people

The attractiveness of the geographical location and the people with whom one could enter into a partnership was another variable mentioned by half of the respondents as significant in their choice of partners. Asked to explain this reason, some survey respondents stressed the practical importance of choosing a place and people with whom they knew that the donors were familiar. However, not all the Northern donors necessarily follow the same preference (see for example the Dutch government and its multi-annual, multidisciplinary research programmes in Bolivia: Velho et al 2004:11).

4.2.4 Language

The responses of the survey participants show that language was not a major determinant in the choice of NCCR North-South partners. However language did have some influence in three of the partnership regions: French and Spanish-speaking individuals and institutions mentioned that they preferred to work with partners who speak the same language, as this ultimately influences communication and the selection of individual researchers.

Box 2: Finding a common language

A number of respondents pointed out that a great deal of energy is necessary to establish an intellectual platform with adequate language and concepts. If a research partnership fails to build trustful working relations for lack of translation, the cost can be very high and critically affect the scientific and development-related outcome of the research partnership.

Interestingly, in the first years of NCCR North-South collaboration with Caribbean and Central American partners, there was an understandable reluctance among these partners to accept that English was the language of the NCCR. On the one hand, these Spanish speakers – mostly social scientists – associated the imposition of English with creeping colonialism. On the other, they felt disadvantaged in scientific communication because they could not share their arguments and conceptual reflections, which were strongly influenced by their own Spanish-speaking scientific community. As a result, these partners

collaborated mainly with their immediate Northern counterparts, using Spanish instead of English, and had little contact with the rest of the NCCR North-South members. By contrast, collaboration between Northern partners and partners in Spanish-speaking South America and French-speaking West Africa was maintained and language issues were dealt with in an ad hoc manner, to the satisfaction of all the partners involved.

In Kyrgyzstan, at the beginning of the programme, the difficult and unfamiliar terminology of the NCCR North-South was not clearly understood by Southern students and their supervisors, which led to different understandings of the same issue. In order to overcome these difficulties, regular meetings and discussions were organised, and a glossary was developed. These measures proved successful in resolving these tensions and misunderstandings.

At the beginning, several key NCCR North-South concepts were alien to new programme members. Partners worked towards defining a common language; in some cases this even led researchers to develop an understanding of an unfamiliar discipline and defend the need for applying it. For example, a sanitation engineer in South Asia reported that he became a staunch defender of the need to integrate a social science perspective in discussing the use of more sustainable toilets and wastewater systems. Other natural science researchers, e.g. veterinarians, soil scientists, and agronomists, reported similar new insights. Some social scientists also mentioned they had modified their attitude towards the natural sciences and developed an understanding and appreciation of the mode of inquiry used by natural scientists.

4.3 Sufficient resources to develop capacity where necessary

The discussion in Chapter 3 highlighted the importance of capacity development for successful implementation of the research partnerships and achieving the goals of collaboration. Competent researchers, conducive institutional arrangements, and development

of additional capability are crucial enabling factors in research partnerships and justify the inclusion of capacity development as a component of most research partnerships (Bradley 2007a). Human resource development is a medium to long-term objective; obtaining the desired results from the research partnerships thus requires provision of long-term financial security. The NCCR North-South research partnership experiences show that even if the budgets for each partner were not very high, the fact that the partnerships had a long-term perspective was instrumental in enabling individual and institutional partners to generate new resources (see sections 3.1.2 and 3.2.2).

4.3.1 Progress at individual level

Some NCCR North-South PhD students not only got higher positions after completing their academic degree (e.g. in Nepal, Pakistan, and Côte d'Ivoire) but also expanded their resource base, acquiring new research projects (e.g. PhD graduates of the second phase of the NCCR North-South are now leading RPs in Phase 3 in Ethiopia, Nepal, Mauritania, and Côte d'Ivoire) and obtaining funding from additional sources (e.g. in Pakistan and Côte d'Ivoire).

4.3.2 Progress at institutional level

At the institutional level, several partner institutions in the South also obtained funds from other sources and expanded their activities; in addition to the examples presented in section 3.2.2, it is worth citing the case of the SDPI in Pakistan and the Nepal Institute of Development Studies (NIDS), both of which acquired funding to expand activities that were launched with the support of an NCCR North-South partnership. With regard to the development of other institutional aspects, the respondents from the East African Region mentioned that both academic and non-academic institutions have benefited from the improved managerial and infrastructural capacity developed in the course of their collaboration with the NCCR North-South. This was realised through an increase in staff

numbers and training, an expansion of the programme and the volume of work, an increase in fundraising, and improvements in financial management.

4.4 Commitment of research partners and development cooperation agencies to engage with one another

Beyond the mere commitment of donors to provide funds for research, and of institutions to conduct this research, achieving sustainable development requires the involvement of more than just one actor: it requires commitment from development agencies, the research community, policy-makers, decision-makers in a number of sectors, and society at large. Indeed, the interview and questionnaire results repeatedly revealed the importance of individual and institutional commitment to the programme's goals and the crucial role of collectively reflecting on experience and learning for the future.

Thus, some PAMS brought about many unexpected outcomes, including the emergence of new and important institutions as a result of successful collaboration between the researchers and other stakeholders: the Consortium for Land Research and Policy Dialogue and Paurakhi (an NGO working on female migration issues) are two examples from Nepal that were unanticipated outcomes of the PAMS project. While developing the proposal for the two PAMS projects, it was not anticipated that the forums which were launched by the PAMS would become so successful: over time, new organisations emerged from the two projects and have become respected partners in policy debates in Nepal. This in turn led to additional research conducted by the research partners.

Moreover, in many cases, NCCR North-South partnerships were built on more than five decades of engagement of Swiss research and development partners interacting with one another in different regions. For example, the Swiss TPH (former STI) in Basel has been engaged in West Africa and in East Africa since the 1940s; it became one of the seven NCCR North-South institutional

partners in Switzerland and has been coordinating and supporting collaboration among research and development partners in both regions since 2001. Similar examples can be found in the other regions as well. In the Horn of Africa, collaboration and research activities were maintained with support from the Swiss government at a time when it was not possible to establish memorandums of understanding with national academic institutions. The commitment of those involved and their desire to build on the experience gained eventually led to new openings at the highest level; after many years an agreement was signed on 27 November 2008 between the Ethiopian and Swiss governments, creating the much-needed institutional framework for more effective research partnerships between South and North in this region of the world.

Have the NCCR North-South partnerships had any significant impact on partners' ability to engage with development cooperation and vice versa? The synthesis of the responses obtained from the respondents is "To some extent, yes". Fewer than one third of the respondents reported that international development agencies had made use of NCCR North-South partnership experiences. However, almost half of the partners reported that the NCCR North-South partnership had been helpful in expanding collaboration with other national and international agencies. Non-academic partners proved able to mobilise more resources than academic partners could. Similarly, collaborative projects with other international agencies were commoner among non-academic partners than among academic partners.

Interestingly, on the whole, partnership activities were reported to have had only a minor influence on the research policy of development cooperation agencies. Reasons given to explain this included:

- a) Development agencies had different priorities from the research partners;
- b) Key decision-makers in development cooperation agencies (especially SDC) had a different perception of what

research for development should be, preferring solution-oriented consultancies;

- c) Research organisations often define themselves in a very different way from development organisations; and
- d) There is a lack of a robust platform in the host countries that enables researchers and development agencies to come together and plan collectively (e.g. National Planning Commissions, often the leading agencies supposed to coordinate between research and development agencies, are weak).

4.5 Transdisciplinary approach for connecting research and society

As mentioned in Chapter 2, the transdisciplinary approach was consciously chosen from the inception of the programme. The overall conceptual framework was adapted and refined over the years, based on the evolution of research partners' findings, as well as of the partnerships within which the research was being conducted, and of the relations established between research and other stakeholders.

The transdisciplinary approach remained the key to enabling researchers in the North and South to bridge the gap between research and society and ensure that research is relevant to those concerned by the issues investigated. NCCR North-South research activities in the partnership regions are directly related to existing problems of society and to people's needs. For example, the research conducted in West Africa focuses on tuberculosis in nomadic environments, health and environment, social representations of HIV/AIDS and their influence on prevention, and the tuberculosis Information-Education-Communication nexus in Mauritania. Obviously, a disciplinary approach to research can hardly lead to the kind of insights needed for such societally relevant knowledge. Nor is it conducive to research partnerships aiming to produce knowledge for sustainable development, which requires a strong

degree of interaction with non-scientific stakeholders (van Kerkhoff and Lebel 2006:451).

The experience of the NCCR North-South shows that the transdisciplinary approach made it possible for research partners to cross disciplinary, institutional, and stakeholder boundaries in the search for knowledge for more sustainable development, thus enabling them to enhance the effectiveness of research partnerships in many reported instances. Interestingly, adoption of transdisciplinarity was more problematical for Northern research partners, who were more strongly committed to criteria of scientific excellence defined mainly by disciplinary (rather than transdisciplinary) science. Southern partners in general and South Asian research partners in particular had fewer difficulties justifying scientific work geared towards direct interaction with societal partners. At the same time, this forced some Southern partners to face a difficult dilemma: to publish in peer-reviewed journals or opt for local means of distribution such as books, newspaper articles, FM radio, and television. Ideally, a balance between the two is the best strategy.

4.5.1 Partnership action projects (PAMS)

PAMS – presented in Chapter 3 in detail – have provided numerous opportunities to enhance interaction between social scientists, natural scientists, policy-makers, politicians, development agencies, civil society, the media, and local communities in the South. They have been a crucial tool for research partners looking for a means of validating their findings and enhancing their relevance to society at large. For the South, the programme has provided the human and financial resources for conducting such projects; for the North, the South has made available a congenial workplace to gain more experience with this innovative programme component. Thus, PAMS have been of mutual benefit for the institutional partners in both the North and the South – and definitely an enabling factor for partnerships.

4.5.2 Mechanisms for facilitating exchange and engagement

Effective mechanisms for bringing various actors together in research partnerships for sustainable development have been stakeholder meetings, conferences, and workshops at the local and national levels. At such events, researchers have presented their findings, policy-makers have been able to assess the feasibility of implementation, and the people – the ultimate beneficiaries of the findings – have been able to discuss both the problems to be researched and the findings resulting from the research, and provide important feedback for the researchers. Often new ideas, perspectives, and issues emerge from such platforms, which provide an opportunity to respond collectively (in terms of commitment, delivery, and ownership).

Interaction between research partners within the NCCR North-South programme is also supported by dedicated mechanisms. ITCs and RTCs have proved essential for students to share their research and generally embark on more concrete and more interdisciplinary research partnerships. Yearly meetings of key collaborators (RCs, heads of institutional partners from the North, RP leaders, thematic experts such as gender specialists, etc.) provide an opportunity for planning, implementing, learning, reflecting, and adapting activities for the benefit of partnerships. RABs have proved to be a further crucial tool for enhancing research partnerships; they support the scientific and programmatic aspects of research in the partnership regions and have contributed to institutional capacity development.

Developing mutual trust and collective ownership – key principles that enable successful research partnerships – is supported by a common understanding and concerted action (Freyvogel 1996; KFPE 1998; Ashman 2001; Gyapong 2001; Blagescu and Young 2005). The respondents to the EPD survey mentioned that conducting research projects in partnership arrangements was demanding but also rewarding. Especially respondents who already had long-term and trustful relations with their research partners from other geographical and disciplinary contexts said

that research partnerships were not much different from other kinds of research collaboration if a common language and mutual understanding could be developed. According to the responses received, the issue of overcoming North–South-related barriers and inequalities – a potential source of interpersonal problems and conflicts – did not seem to be a matter of concern once trust and a common understanding of the work to be done and the approach to take had emerged.

Research for sustainable development is meaningful only if its findings reach policy-makers and practitioners. No matter how high the quality of scientific publications, the ideas conveyed in these publications will not significantly contribute to sustainable development if they are not accessible to key policy- and decision-making stakeholders, implementing agencies, and end users. In addition to the various platforms for exchange mentioned above, the NCCR North-South developed regional communication strategies aiming to increase the effectiveness of disseminating research findings. Among the means promoted in these strategies are policy briefs, working papers, contacts with the media, and participation in national and international events.

The North–South Exchange Project has been an additional instrument for promoting exchange at all levels. It provides opportunities for short-term research experiences in Switzerland, conducted jointly by Southern researchers and a Swiss counterpart. The first North–South Exchange Project was carried out over four weeks in summer 2008 on the topic of “Institutions and mechanisms regulating Swiss alpine pasture use and the marketing of pastoral products” (Fokou et al 2008). This project has close links with other thematic research projects of the NCCR North-South in the field of pastoralism, health, institutions, and land management (e.g., Pastoral Production Systems).

The idea of conducting this short-term research project in Switzerland was to look at and reflect on pastoral organisation and land management from three different cultural perspectives, combining experiences from West Africa, Central Asia, and Switzerland. The

researchers involved greatly appreciated the opportunity to share views and learn from each other as well as from getting into direct contact with Swiss farmers during interviews and field visits. Their knowledge production process was characterised by a participatory approach. All of the researchers had an opportunity to contribute equally, bringing in their interests and views. Until now, their joint research activities have resulted in a written report, reflecting on their research insights and their experience with this kind of short-term research partnership. The researchers remarked that they were lucky that the working atmosphere was always good and they shared more than just thematic interests. They recall that a side-product of this encounter is the network they created as a result of close and intensive work together. Limiting factors, however, are manifold in this kind of North–South exchange. Language is one issue, as most documents and archive material are only available in German. Other constraining factors are limited time and financial resources, which hamper a follow-up on questions that arise during the field research.

4.5.3 Proactive engagement with development cooperation and policy-making

When partner organisations reported on whether or not they had been asked to help develop international agencies' programmes, most of the institutional respondents reported that this was not the case. Some of them invoked the lack of interest of development agencies in engaging with research institutions. However, research institutions reported on several achievements that are compelling examples of the impact that their NCCR North-South activities had on development cooperation and policy-making, as a result of their proactive engagement with these non-scientific partners.

One example of engagement with international organisations is from Southeast Asia. A 'Regional Symposium-cum-Training Workshop on Sustainable Faecal Sludge Management in Asia and Pacific' was conducted jointly by the NCCR North-South,

the AIT, Thailand's Ministry of Physical Planning and Housing, and UN-Habitat. The participants in this workshop, especially those affiliated with the Ministry of Public Health and local administrations, reported having gained insights and exchanged practical experiences on FSM in Asia and the Pacific; they created a regional network on sustainable sanitation in Asia and the Pacific, and jointly developed strategy plans for effective sanitation planning in the short and long term. The Southeast Asia region offers further examples: innovative research on poverty and land cover dynamics had a major impact on policy through a broad range of donors – including SDC and the World Bank – which supported two concrete development projects inspired by the research and linked to a continuation of it: a socio-economic atlas for Laos – which led to a follow-up project for Vietnam – and a long-term biodiversity programme linked to a high-resolution knowledge platform.

A further example is worth mentioning, this time from South Asia: after working on migration issues, researchers eventually engaged with aid agencies, international NGOs, senior policy-makers, planners, and practitioners to examine the issues, challenges, and opportunities of domestic work done by migrant workers (Figure 13). This policy debate was organised by the training wing of Nepal's Ministry of Foreign Affairs in collaboration with the NCCR North-South, NIDS, UN Women, and other international partners. The Minister and the Secretary of the Ministry of Foreign Affairs, Secretary of the Ministry of Labour and Transport Management, Programme Coordinator of UN Women, researchers, people working in the field of migration, and manpower agencies discussed the issues to be addressed by migration policy. The participants pledged to further interaction to work on the policy addressing the issue of migrant domestic workers.



Figure 13: Nepal's Foreign Minister addresses a multi-stakeholder meeting, organised by Institute of Foreign Affairs/Ministry of Foreign Affairs, Government of Nepal, on 14 July 2011 triggered by NCCR North-South research on migrant workers. (Photo: Bishnu Raj Upreti)

4.6 Creation of stable regional bodies

An innovative enabling factor for research partnerships in the NCCR North-South programme was the establishment of stable regional bodies, the RCOs. Lean RCO structures either associated with local academic partner institutions or created as independent units became instrumental in coordinating, supporting, and connecting NCCR North-South programme members with the various national partner institutions and individuals in each region (see also Chapter 2.3).

The RCOs have led to enhancing the responsibility of Southern partner institutions in each region. In addition, the fact that they have become stable bodies has made it possible for the RCs to take responsibility for South-South partnerships, which key interviewees said were one of the most important ways forward for the future. Such partnerships have developed in the course of the programme, initiated by the RCF and supported by separate funds allocated specifically to South-South projects upon submission of sound proposals.

All of the RCOs are backed up by RABs. RABs have become a powerful enabling factor in NCCR North-South research: they are expert forums that provide intellectual, academic, and programmatic support to the RCs in their research partnership activities in the respective regions. RABs are constituted based on individuals' interest in participating, their competencies, their availability, and the relevance of their academic and professional background to NCCR North-South collaboration. Both academic and non-academic institutions are represented in the RABs, which ensures the necessary diversity of competences and experiences for a transdisciplinary approach to research. Key interviewees have confirmed that their experience of collaboration with the RABs in the partnership regions is very positive and has really strengthened the research partnerships.

The RABs have also succeeded in attracting research funding from external sources other than the NCCR North-South. For example,

Box 3: Regional coordination bodies: RCOs and RABs

Stable regional mechanisms are a prerequisite for a successful North-South research partnership, particularly if operations are implemented in more than one region. In addition to the Regional Coordination Offices (RCOs), Regional Advisory Boards (RABs) have played a key role in strategy development, planning, monitoring, and supervising research and students. In most cases the RABs have also represented the interests of the partner institutions.

in the East African partnership region the RAB was able to generate funding from the Volkswagen Foundation for a three-year research project that supports 4 PhDs and 2 post-doctoral studies in the context of semi-arid areas in transition. Apart from generating additional research funds, RABs are also helping to promote networking and expansion of research partnerships beyond the NCCR North-South, through the participation of senior researchers from new departments in local universities (as supervisors) and Northern universities (as co-supervisors and co-applicants).

The RABs' natural involvement in selection of students, joint student supervision, and joint publications is appreciated by RAB members, as underlined by a Kyrgyz

academic partner: “As a supervisor of PhD and MSc students, I liked our joint field trips, when we went to the study area and every group of researchers – which included supervisors, PhDs, and Masters students – showed their own disciplinary method and presented results, and then we discussed this. It was a very good practice of close partnership.”

4.7 Common guidelines and procedures

Bradley (2010) has underlined the need to define common procedures and structures together. For partners within the NCCR North-South, the framework chosen to help guide activities consisted of several elements: the KFPE’s 11 Principles (KFPE 1998), Rules of Procedure adapted for each new phase of the programme, structural elements with corresponding levels of responsibility, instructions for modifying the composition of research groups to achieve a higher level of thematic and regional integration, rules for selecting PhD candidates, decisions taken by the BoD, and various strategies and guidelines. The Southern ownership of the rules, structures, and guidelines increased over time, especially when it became possible for the Northern and Southern partners to jointly adapt them and formulate new ones.

In the following sections we present the guidelines and procedures that have been the most helpful in implementing the research partnerships. We start with the survey respondents’ perception of how well the 11 KFPE principles were applied.

4.7.1 The 11 KFPE principles

In the original research proposal of the EPD, the 11 KFPE principles (KFPE 1998) were used as a basis for designing the partnerships to be implemented by the programme. The EPD study shows that implementation of the principles was assessed in different but generally very positive ways.

Most respondents in the South felt that the KFPE principles were being followed to a great degree. Compared to other principles,

Box 4: The 11 KFPE Principles of Research Partnership

1. Decide on the objectives together
2. Build up mutual trust
3. Share information; develop networks
4. Share responsibility
5. Create transparency
6. Monitor and evaluate the collaboration
7. Disseminate the results
8. Apply the results
9. Share profits equitably
10. Increase research capacity
11. Build on the achievements

Source: KFPE (1998)

however, the principles of ‘deciding on objectives together’ (#1), ‘applying the results’ (#8), and ‘sharing profits equitably’ (#9) were assessed as being applied less systematically. The respondents from the South explained that sharing profit was more applicable in business partnerships, whereas in research and development, agencies only share benefits. Hence, they suggested that the principle be reformulated as “sharing benefits equitably”. Most of the respondents gave highest scores to the last two KFPE principles, ‘increase research capacity’ (#10) and ‘build on the achievements’ (#11).

The Northern responses were diverse, ranging from strongly supportive of the 11 principles to strong criticism. The spectrum of opinions of Northern individual partners is reflected in the following quotes. One partner fully believes in the power of the KFPE principles to enable partners to implement well-functioning partnerships and overcome colonial prejudice: “I am proud that Switzerland has the research partnership guidelines. I use them; I send them to partners. These are their rights and our obligations. We are not colonialists any more. The guidelines show the partners that they have the right to participate in the agenda-setting, etc. I think that respect and partnership are research attitudes. And it is also a question of policy.”

Other Northern partners are less positive, but remain convinced that the principles are of use: “The guidelines are there. Clearly, in reality they do not work 100%.” Or they tacitly accept the validity of the KFPE principles but have developed their own principles: “I have my own way of doing it [conducting research in partnership]. I think I am not very far from them [the guidelines].”

The most negative view expressed by an interviewee shows an awareness that implementation of successful partnerships requires a different kind of guidelines and a greater perception of the pitfalls of power relations in a North–South setting: “The guidelines are not relevant for research practice. [...] [They] are very functionalistic. They do not see the people in the research partnerships, which imply conflict and getting involved with each other. The partners need to develop a level to relate to each other and to establish mechanisms to continue relating to each other. The guidelines still have a paternalist undertone. [...] Questions of competence and authority, power, and responsibility would need to be part of the guidelines.”

One research partnership principle, “Decide on the objectives together”, provoked a lot of comments among the individual respondents from the North. For example, someone said: “[it] is often like this: We propose a problematic which corresponds to the questions and discourses discussed and debated in the universities in the North, which are often a little bit aside the real needs and demands.” And another respondent reported: “We applied for funds [together] with them [the local partners], but wrote the pre-proposal by ourselves. It took us a long time to start the project because our partners never understood what was really in the proposal.” This confirms that joint agenda-setting is a very difficult task to achieve, as pointed out by numerous other studies (see for example Baud 2002; Blagescu and Young 2005; Johnson and Wilson 2006; van Kerkhoff and Lebel 2006; Bradley 2007b).

4.7.2 Board of Directors’ decisions, guidelines, and strategies

According to the respondents, the NCCR North-South’s common guiding principles, strategies, and procedures were generally considered as useful instruments for making joint activities work in such a global partnership programme, which has seen the involvement of over 140 institutions and more than 400 researchers over the past ten years. These instruments were felt by respondents to have advanced the partnerships, minimised confusion, and anticipated potential conflicts.

4.7.3 Specific guidelines for International and Regional Training Courses

Broader guidelines for expenditures, representation, pedagogical focus, training evaluation and reflection, exercises helped a lot to smoothen and streamline the organisation of the Regional and International Training Courses. As Chapter 3 reveals, the ITCs and RTCs were felt to have been among the most effective tools for individual capacity development.

Respondents' assessment of the value of ITCs and RTCs was sought at the end of each course. This enabled participants to provide valuable feedback on what worked well and what had not been successful during the training, eventually leading to joint development of guidelines by Northern and Southern resource persons. On the one hand, trainers were faced with a dearth of didactic and pedagogical material on how to conduct courses that cover a huge variety of disciplinary needs. On the other, they were eager to expose students to the realities of inter- and transdisciplinary thinking and communication.

Developing guidelines for such trainings was thus a unique opportunity to benefit from monitoring of events, sharing among Southern and Northern resource persons, and thinking together about the possibilities and limitations of integrated training within the context of research for sustainable development. The resulting experience and materials have enabled partners – particularly in the South where more interest in training was available – to engage in creative and constructive work towards developing competence in and curricula for sustainable development research.

4.7.4 Specific guidelines for the Advancement of Women

Ideally, research partnerships should be accessible to both women and men and help bridge the gender gap in the scientific community. In addition, partnerships with a focus on research for sustainable development and seeking to have an impact on society

should take into account gender issues in research, wherever these issues have an impact on equity (Jackson 2002).

Since it was launched, the NCCR North-South has made special efforts to increase the number of female researchers and promote gender sensitivity in research (Ott and Bieri in press). Advancement of Women (AoW) principles were defined in the first phase and corresponding guidelines were proposed, then adapted over the years according to new insights and demand. The guidelines recommend measures such as provision of career counselling, encouraging a gender-friendly working environment, including women

in decision-making structures, ensuring that female students are encouraged to do an academic degree – starting with a Masters especially in those countries where no women were eligible as PhD candidates – and including a gender perspective in research proposals. Both Southern and Northern partners increased their efforts to ensure a higher participation of women as of the second phase, and consulted the specialist for gender in research mandated by the NCCR North-South when necessary.

Compared to other achievements, AoW in the NCCR North-South programme is still comparatively low. Despite many efforts to involve female scientists, the outcome is below expectation in those regions where difficulties exist for socio-cultural reasons. Finding competent female candidates for Masters and PhD degrees is difficult, and when women enrol, the drop-out rate is high in some countries. For example, in Mauritania, among the few female students who applied for a BSc fellowship to conduct a multidisciplinary study on poor settlements of Nouakchott, only one woman completed her degree.

Box 5: Minimising inequality

Although significant efforts were made over the years, really substantial change in establishing a balance of power and resources between Northern and Southern partners would be too ambitious to expect in short term. Achieving the aim of correcting inequalities takes time and special efforts to overcome dominating habits among Northern partners, submissive attitudes among Southern partners, and gender bias, which are reflected in personal, collective, and institutional patterns of behaviour.

Increasing participation of women from the South in Central Asia, South Asia, West Africa, and East Africa, where cultural barriers prevent female students from embarking on a PhD or post-doc, was also mentioned as very difficult. Indeed, this would require greater attention and support from gender specialists capable of exploring the cultural barriers in the employment and academic education sectors in each country, and suggesting feasible solutions. The resources allocated to AoW within the NCCR North-South were too low to be able to embark on such a project in a systematic way. The strategy for AoW certainly increased the participation of women in research activities over the years, including in the regions mentioned above. In particular, the overall gender balance improved at the critical level of post-docs and RP leaders as of the second phase, which shows that efforts did succeed in many cases, making research partnerships accessible to women and making gender sensitivity a standard criterion in developing project proposals.

4.7.5 Regular site visits

Regular site visits by an international review panel consisting of independent academic experts and representatives of the donors (SDC and SNSF) were reported to have been very helpful to NCCR North-South members. The Review Panel devotes time for visits to selected countries and research sites nearly every year. The Review Panel members interact with different stakeholders (the PhD students, their supervisors, senior researchers, local people, representatives of the institutional partners from the South and the North, RCs, and decision-makers from the government, donors, international NGOs, and local NGOs). The Review Panel members observe the achievements physically and give scientific, managerial, and policy feedback to the NCCR North-South decision-makers and other concerned stakeholders; they compare progress against the stated objectives and suggest options for improvement. This process has provided important backing for the different research partnerships.

4.7.6 Joint planning, monitoring, and reflection

In the interviews, respondents noted that the partnership environment for the researchers and partner institutions is greatly enhanced by an open and transparent process when i) defining the research agenda (goals, objectives, and outputs), ii) setting up the operational structures (administrative principles and rules of the game), and iii) planning and allocating resources. Although they criticised the administrative burden that results from joint planning, monitoring, and decision-making, they said that such processes were necessary in a situation where partners are confronted with cultural differences, technological divides, and fundamental inequalities.

4.8 Conclusions

In a programme characterised by a multitude of disciplines, research interests, academic cultures, socio-economic, political, and employment contexts, as well as by a diversity of cultural norms, finding a common understanding of what the purpose of the programme is and how to implement it has proved to be a challenging process requiring key partners to produce continual collective efforts. These efforts to build productive research partnerships have been supported by a number of enabling factors, presented in this chapter from the perspective of the respondents who participated in the EPD study in the Southern partnership regions.

The seven enabling factors distilled from the respondents' answers and their success stories show that well-understood, managed, and monitored partnership processes help to structure interpersonal relations in a constructive way, even where differences seem insurmountable. One lesson learned has been that controversy and critique cannot – and should not – be avoided (see also Bossuyt and Laporte 1994; Brinkerhoff 2002; Mayers and Vermeulen 2002), and that a partnership agreement in itself will not automatically lead to a change for the better in relationships between partners if

adequate processes are not enabled and implemented. This requires mutual trust and ownership, which can only be built over the long term. Indeed, it took a number of workshops, email interaction, and joint research, publication, and policy activities to build a common understanding and a willingness of partners to achieve scientific excellence and relevance of research to society together.

Despite the numerous accounts of achievements of the NCCR North-South partnerships on the one hand, and the reflection on what enabled these stories of success on the other, numerous challenges remain to be tackled. This is what our final chapter focuses on.



Where do we stand? The effects of global change are not limited to developing countries: they are also felt in developed countries, along with their risks and potentials. Developed societies, according to Beck (1992), are ‘risk societies’ whose economic, socio-cultural, and environmental activities bring about changes that have a huge impact far beyond their own borders. Hirsch Hadorn et al (2008:19) state that “modernisation itself induces hazard and insecurities, which calls for precautionary and systematic ways of dealing with hazards as essentially political issues.” The challenges posed by global change are thus of collective concern to both science and society on the one hand, and to the global North and South on the other. If they are to be dealt with, they therefore require the concerted efforts of actors in research, policy, and development, from both developed and developing countries. Research partnerships have proved to be an effective means of organising and implementing such efforts, as confirmed by numerous studies to date (see Bradley’s review, 2007a).

What funds for research partnerships? In an ideal world, perhaps one could argue that research partnerships should be funded equally by whichever country the researchers are working in, and that funding of research and capacity development should not be necessary across borders: each country should be able to fund its own research and research institutions. But this is far from being possible in the world as it is today, and official development assistance (ODA) from the North will continue to be needed in the South to produce the kind of knowledge necessary to meet the challenges of global change. Moreover, ODA will also continue

to be necessary to strengthen the development of the ability of Southern individuals and institutions to conduct research.

Indeed, as argued by Bradley, “[c]oncerted leadership from driven, well-trained and well-connected Southern researchers is typically essential to the creation and maturation of Southern institutions” (Bradley 2007b:22). ODA investment in capacity development can only achieve sustainability when Southern research institutions can reach “maturity” and have equal access to sufficient competitive research funds from national and international research donors. Further engagement of Northern donors from both the development and the research community therefore remain essential at present.

Why a Southern focus? Support from the North for training, institution building, and South–South networking remain crucial. But such support needs to be based on clearly defined principles that help to avoid the danger of neo-colonial interventionism. This is particularly important when research is oriented towards development issues related to challenges arising from global change, as stressed for example by Scholey (2006). In her analysis of peace-building research, she points out that the research agenda in this field has to date mostly been defined by the North, although the greatest need for such research is determined by issues in the South. A number of other authors have shown a similar need for Southern-driven research in other fields of knowledge production, in particular in the field of health (see Bradley 2007b). Therefore, involving Southern research partners in agenda setting is crucial, and this can only be done if there exists a critical mass of researchers and research institutions in the South.

What has the NCCR North-South learned? This publication offers a broad range of examples, lessons learned, and issues to be addressed in the practice of North–South research partnerships aimed at sustainable development. It also highlights the factors that can be particularly enabling for development-oriented research

partnerships, on the basis of its own experience and an analysis of the literature. The insights presented in this book emerged mainly from a Southern-driven study of the partnership dynamics of an on-going long-term research programme implemented in nine regions, eight of which are located in the global South. Among the noteworthy particularities of the NCCR North-South presented in this publication are its components aimed at individual and institutional capacity development, its transdisciplinary approach and tools to link research, policy, and practice, the adaptability of its structure and governance, and its broad thematic scope, which have led to many genuinely interdisciplinary practices and innovative methodologies. In addition, the programme has enabled a lively South–South research network to emerge, spanning three continents: Asia, Africa, and Latin America. As stressed by Bradley, “cooperation between Southern institutions can be instrumental to the emergence of strong research centres and, in turn, vibrant national research communities” (Bradley 2007b:22).

Our reflection on the NCCR North-South’s experience with implementing research partnerships at the global level has also revealed several challenges in connection with the current constellation of actors involved in such partnerships. We present these here as a concluding chapter, along with recommendations to three categories of actors involved in research partnerships: research funding agencies, development donors interested in funding research and supporting capacity development, and researchers and their institutions. We believe that these three key actors of development-oriented research need to collaborate closely and work in a complementary way in order to ensure that their efforts contribute to the broader goal of addressing the challenges of global change and moving towards more sustainable development. All three need to be aware of each other’s field of action and responsibilities; they need to organise their own priorities accordingly but must remain supportive of one another in addressing the challenges of doing research in the framework of North–South partnerships.

Challenges today: The main challenges facing research partnerships that we would like to discuss in this concluding chapter, on the basis of the experience of the NCCR North-South programme, are the following:

1. The continued need to invest in capacity development (individual and institutional);
2. The need to utilise locally available resources and capacity, and ensure diversification of the resource base;
3. The difficulty of fulfilling diverging and competing expectations when addressing global challenges of sustainable development;
4. The difficulty of linking research, policy, and practice and implementing a transdisciplinary research approach;
5. The difficulty of dealing with power asymmetries and promoting flexibility, transparency, and accountability.

After briefly presenting each of these challenges, we summarise the lessons learned by the NCCR North-South and mention the solutions developed by the programme. This is followed by our recommendations to the three key types of actors mentioned above.

5.1 The continued need to invest in capacity development (individual and institutional)

5.1.1 The challenge

There is an increasing trend among donors to fund short-term, “projectised”¹ research rather than long-term research programmes with capacity development components. Indeed, there is growing popular pressure on development cooperation in Switzerland to

¹ The concept of “projectisation” has emerged in recent debates about the dependency of self-funding organisations – in particular NGOs – on donors and donors’ funding strategies rather than on their own declared mission. The negative result of so-called “projectisation” is that NGOs and research institutions make decisions mainly on the basis of emerging and erratic funding opportunities rather than on the basis of their own, coherent strategy.

fund projects that will have an immediate result on the ground – e.g. the income of so-and-so many poor people has increased, 20 villages now have improved sanitation, the food security of poor and marginalised people in the lowest political units in a specific small area is ensured, etc. While such activities are unquestionably useful and necessary in themselves, the sum of these research projects cannot produce the larger, integrated picture needed to tackle broader challenges. Nor does it help to sustain existing research institutions in their efforts either to join international expert communities or to remain competitive within them.

In addition, Northern donors are accountable to political constituencies in a more general way. In the case of national development agencies [SDC, Danish International Development Agency (DANIDA), etc.], this means that they have to satisfy the political requirements defined by parliaments. As Bradley (2007a) points out, donors “such as DANIDA are explicit about the fact that they expect Danish-funded development research partnerships to support Danish policy-making processes” (p. 18; see also p. 43). In the case of Switzerland, this has led to the recent change of strategy with regard to financing research in the South. The SDC has to ensure that funds given to the South also help to increase the visibility of Switzerland as a country, as well as to promote Switzerland’s own priorities.

Thus, supporting the development of individual researchers’ abilities and the capacity of Southern research institutions to conduct sound and internationally acknowledged research on the one hand, and their ability to train upcoming generations of researchers on the other, is no longer a priority in the development sector in many donor countries. Even if donors focus on education, in most cases their priority is primary education. This is arguably partly the result of the global Millennium Development Goals agenda, which focuses on advancing primary education. While primary education is indeed an urgent need, by itself it is not sufficient to develop the human resources capable of addressing the

challenges faced by a country in the context of global change. Nor can primary education alone provide the expertise needed to support developing countries' policy-makers and leaders in elaborating sound strategies for promoting sustainable development.

5.1.2 The NCCR North-South's approach

The NCCR North-South programme had the privilege of benefiting from an earlier political era in which research partnerships combined with a capacity development component were perceived by Swiss development cooperation as a useful and necessary form of support. The programme developed its own, adaptable approach to individual and institutional capacity development. On the one hand, it aimed to increase both the number of graduates in higher education (initially masters and PhDs, and later post-docs) and the level of their research competency in dealing with global change issues, and has had remarkable success in developing their abilities (see Chapter 3.1).

On the other hand, the programme pursued a policy of strengthening research institutions in selected countries, by introducing a range of different measures: North–South supervision tandems for doctoral candidates, training of trainers in integrated research for sustainable development, support for contacts with university authorities in order to establish new curricula, and support for a Southern network of development-oriented research institutions (Chapter 3.2). In addition, the programme invested in the empowerment of eight institutions that were selected to become RCOs. The current book provides ample evidence – especially from Southern partners – of the effectiveness of the donors' earlier, more positive approach to academic research.

5.1.3 Further recommendations

It is important for the development sector to address the lack of investment in capacity development in tertiary education. Without a critical mass of researchers and research institutions

in developing countries, it is highly likely that policy-makers and leaders will rely on external expertise and models to try and address their countries' own problems. Often, such a choice leads to inappropriate development solutions. While funding for both short-term and impact-oriented research is undoubtedly useful, there is also a need for long-term development of sound research institutions capable of addressing broader research issues and training future generations of researchers within the country. This also requires commitment from Northern research donors, whose earmarking of funds for research collaboration with Southern partners should be continued.

In addition, the constant engagement of researchers and research institutions with political decision-makers is necessary, on the one hand, to ensure that development-oriented research is integrated into development strategies, and on the other, to promote the incorporation of capacity development-led research plans and strategies into national planning and the allocation of resources within the relevant ministries.

5.2 The need to utilise locally available resources and capacity, and ensure diversification of the resource base

5.2.1 The challenge

The principle of sustainability would require working with existing and locally developed structures. However, research partnership arrangements often create new parallel structures and processes, arguing that the existing ones are inadequate and not efficient enough. There is thus a tendency not to acknowledge that existing mechanisms and structures do in fact have the potential to implement new research partnerships, given that they have developed over time, benefiting from considerable investment and learning from mistakes and from experience, and are potentially capable of adapting to a new context.

In addition, there is a danger that research partners will focus only on achieving the research goals defined by a programme, without investing in thinking about what the researchers and partner institutions will need in order to be able to continue research activities beyond the lifetime of the project. Continuing good research work and engaging in new challenges requires a sound resource base with regard to people, institutions, networks, knowledge, and of course finance. On the one hand, without an adequate strategy for preparing a continuation of activities beyond the lifetime of a project, research partners may fail to reap the long-term benefits of having engaged in joint activities. On the other hand, research is rarely a priority for Southern governments and therefore the allocation of resources for research and academic training is poor. Many partner institutions therefore have to find alternative sources of funding for the future and they need to give sufficient thought to how to diversify their funding base.

5.2.2 The NCCR North-South's approach

The NCCR North-South has gained valuable experience with mechanisms that enable good research partnerships with existing partners but with very different and new objectives. Starting largely with North-South pairs of partners who had worked with one another before, the programme gradually developed mechanisms that improved integration by bringing all partners into a network. This meant that former partnership structures and processes had to be adapted to the new overall research approach and objectives. Apart from resulting in new, thematically driven alliances, this adaptation of existing structures led to the establishment of RCOs capable of organising and monitoring complex regional projects between a multiplicity of partners. As a result, with its over 140 institutions and 400 researchers in the South and the North, the NCCR North-South has arguably emerged as one of the largest global networks focusing on research for sustainable development, by creating a pool of researchers who are competent in dealing with a wide range of connected issues.

The NCCR North-South has also encouraged its partners to search for co-funding arrangements with additional donors, offered support for developing new research proposals, and assisted some partners in elaborating new curricula within existing academic institutions. Some successful ventures of this kind are mentioned in Chapters 3.2.2 and 3.2.3.

5.2.3 Further recommendations

Decision-makers in the research and development communities must avoid creating parallel or new structures. While new structures may be effective in the short term, sustaining them beyond the lifetime of the projects for which they are designed is a major challenge – unless there is a firm commitment and ownership at the local level. This ownership can be gained by refining and strengthening existing research networks that have been established through decades of experience and learning. Continuing partnerships with existing productive collaborators is one of the best options from a managerial, logistical, and conceptual point of view.

In addition to using locally available research institutions, it is important to increase the involvement of indigenous organisations that may have been ignored by traditional research partners until now. Indeed, indigenous organisations constitute a key source of knowledge and human resources that need to be included in the knowledge production process. In addition, it is important to support emerging and newly established networks, thematic and methodological groups, and institutions, as we are in a changing world and innovation for sustainable development sometimes follows the serendipity principle.

Finally, existing donors should support efforts to seek additional funding and new donors should agree to engage in co-funding existing research partnerships; this will ensure the sustainability of investments as well as create synergies and avoid duplications.

Box 6: Development-oriented research

Development-oriented research is often caught between the expectations of academia and development practitioners. Experience shows that performance is often assessed on the basis of academic criteria alone (e.g. citation index), with no appraisal of achievements in capacity development, supervision of students, or the dialogue that takes place with “development practitioners” regarding research findings. On the other hand, development practitioners may miss the opportunity of benefiting from such research because of their bias against research.

5.3 The difficulty of fulfilling diverging and competing expectations when addressing global challenges of sustainable development

5.3.1 The challenge

Different stakeholders in the development sector have different expectations. Thus, political decision-makers expect quick and easy solutions to politically topical issues of development. Policy-makers need policy inputs instead of detailed research. Implementing agencies expect practical solutions to the day-to-day problems they encounter in the field and do not see the relevance of rigorous, conceptually strong, and methodologically sound research that results in peer-reviewed articles – which

development practitioners and policy-makers do not have time to read, anyway. Finally, research institutions are more accustomed to rigorous academic (i.e. theoretically strong, methodologically valid, and replicable) research. These inherently different expectations are an enormous challenge to all stakeholders who wish to work together on finding solutions for a more sustainable form of development.

Even within the research community, development-oriented research partners face the challenge of fulfilling diverging and at times conflicting expectations. Conducting research in and for one’s own institution is a comparatively simple task: all one needs to do is to follow the rules of the institution and be aware of the community within which this institution is embedded. Research partnerships, however, involve dealing with at least two institutions’ sets of rules – i.e. at least one per partner. In addition, when research partnerships have the aim of conducting research

for development in a North–South context, the number of sets of rules that need to be followed is even greater, and the rules may be radically different, if not incompatible. Moreover, the research community at large tends to be relatively non-transparent and non-cooperative because of competition among research groups.

Research partnerships therefore require a high investment in managing the research process to ensure its smoothness and effectiveness. This often comes at the expense of the output (mainly peer-reviewed scientific articles). The development-orientation of the research partnership concept, moreover, usually conflicts with the requirements of the typical academic career path. Moreover, the different research agendas of the funding agencies – especially if the donors serve different communities, i.e. the research and development communities – can also lead to dilemmas for the researchers. Indeed, these donors have different interests and different schemes for measuring performance. While a development agency will appreciate development-oriented and transdisciplinary findings, a purely academic environment may strongly criticise and question the scientific value of action-oriented research. Therefore, to achieve recognition, research conducted in partnership arrangements requires a variety of types of outputs and ways of communicating results, and researchers themselves need to be aware of the values and requirements in each professional environment.

The experience of the NCCR North-South research network engaged in global issues such as food and water security, climate change and environmental degradation, non-conventional security threats, land management, and environmental sanitation and public health demonstrates that individual research institutions and countries cannot address these challenges in an adequate manner on their own. Nor is a solely scientific approach to knowledge production sufficient: global issues require a transdisciplinary approach, as well as a broadening of the geographical and political scope of research (i.e. using a regional and global approach) and the development of integrative thematic competencies. This, in turn,

requires a capacity to synthesise the results of case studies beyond the local and national levels, creating a global systems knowledge base upon which common policy recommendations can be based. This is undoubtedly a major challenge for the coming years and it calls for further development of the theoretical, conceptual, and methodological foundations upon which research for sustainable development can be conducted. Such foundations are also necessary for assessing the soundness of research according to the various norms and rules of the stakeholders who have an interest in producing, financing, or using the knowledge.

5.3.2 The NCCR North-South's approach

The NCCR North-South has opted for a networking and multi-stakeholder approach to addressing the challenges of global change. This has meant bringing together like-minded stakeholders (academic institutions, think tanks, research and policy NGOs, ministries and other governmental departments, and in a few cases the private sector) willing to contribute to sustainable development together, despite their diverging interests. These stakeholders have been involved in jointly defining the problems that need to be researched and in a joint debate on solutions based on the results of scientific research. The transdisciplinary approach adopted by the NCCR North-South has provided a robust conceptual framework for this joint work and has made it possible to develop a methodology for achieving consensus on key issues despite diverging expectations.

In addition, academic partners have crossed disciplinary boundaries and explored interdisciplinary methodologies to work together on complex issues. Such experience and the joint development of new approaches have shown that collectiveness brings strength and can be a source of innovation. The NCCR North-South development-oriented research network thus has great potential for addressing new challenges.

Despite the potential dilemmas and risks for individual researchers who face divergent expectations, both the policy of conducting

research in partnerships and the development orientation through partnership actions has been worth the effort, and it distinguishes the NCCR North-South from other international development-oriented research networks. Moreover, the programme duration of 10 years (with another two to go) and the transdisciplinary engagements have laid the groundwork for experiments with alternative forms of collaboration and knowledge production, and for testing the applicability of scientific results in collaboration with stakeholders in development practice and policy; this has made it possible to counterbalance the negative effects on individuals' careers of not being able to focus only on one set of expectations.

5.3.3 Further recommendations

An effective starting point for addressing potential conflicts and misunderstandings due to diverging interests and expectations among the research and development community is their common commitment to finding ways to address global challenges. Global challenges are too big and too complex for a single organisation to handle. Concerted action is required from the North and the South at different levels of intervention, within different areas of expertise, and using different approaches. Research funding strategies thus need to promote the implementation of mechanisms that ensure collective thinking and concerted action.

Generally speaking, research aimed at the immediate solution of problems should not be the main focus of funding, research policy-making, and academic institution building that aims to address global change issues. The priority should be to strengthen institutions capable of working with a conceptual and methodological framework that addresses the complexity of these issues and brings together the multiplicity of stakeholders. Moreover, young researchers who have demonstrated their ability to work within such a conceptual and methodological framework should be supported in their efforts to make a career in this type of research, and thus overcome the discrimination they may experience as researchers within a scientific community guided by fairly strict disciplinary rules.

5.4 The difficulty of linking research, policy, and practice and implementing a transdisciplinary research approach

5.4.1 The challenge

Dealing with global challenges requires new forms of understanding and knowledge production; this is where transdisciplinary, partnership-based research needs to be implemented. But development agendas in Southern countries are often shaped by the host government, on the basis of the interests of the donors and the conditions they define rather than on the evidence generated by rigorous research. When policy and development actors look for evidence to justify action, they tend to recruit consultants guided by tight terms of references (ToRs) defined by the donors or the host government. These usually do not follow contemporary theoretical and methodological insights derived from the more complex approach needed to address global change issues. Thus, decision-making in the South often does not rely on the findings of sound interdisciplinary and transdisciplinary research but is based on sectoral research.

Moreover, a further impediment to the effectiveness of research efforts is the linear relationship usually assumed to exist between on the one hand the production of knowledge by researchers, and on the other, the transfer of this knowledge to practitioners and local stakeholders, who are expected to “apply the results.” Insights from NCCR North-South research partnerships have confirmed that this relationship between knowledge and practice is not – and should definitely not be – linear. But it is a challenge to convince development, policy, and research partners that “knowledge transfer” is not what they should aim for.

Furthermore, science in general and research results published in peer-reviewed journals in particular are not extensively acknowledged or used by policy-makers and practitioners. The difficulties associated with the use of scientific results published

in journal articles can be due to language (as they are published in English and therefore have a low readership), content (written in a very academic way which is difficult to understand), accessibility (often the journals are not readily available), affordability (the journals are expensive), and mismatch (the content is not directed at the needs of policy-makers and practitioners). Hence, one of the main challenges for making research results available to policy and decision-making audiences is the choice of the means of disseminating research results. This has been repeatedly pointed out in recent literature on development-oriented research and has led to the burgeoning of new professional specialisations at the interface between science and society.

5.4.2 The NCCR North-South's approach

Research partnership experiences across the world show that there are ways out of the conundrum. The NCCR North-South programme has developed a range of means to link research, policy, and practice. A first step was to get together with development agencies to identify the gap: why are they not interested in engaging with researchers and why do they commission only short-term consultancy services instead of transdisciplinary research? The next step was to explore niches for transdisciplinary research and assess the scope of development agencies' engagement in research. Then each partner was given the space to define their own potentials and limitations, identify common areas of engagement, and finally explore the means of communication needed for an effective and productive partnership.

From the research side, linking research with policy and practice has implied not only generating knowledge and evidence that is useful for policy-makers and practitioners and accessible to them, but also implicating them in the process of knowledge production. In this regard the NCCR North-South has developed innovative solutions. The one most often referred to by the participants of the EPD study is the partnership action component (PAMS; see Chapter 3.3). PAMS projects are small research-based projects in

which the findings of research are either implemented or validated by practitioners, local communities, or policy-makers. The range of stakeholders involved in PAMS has been huge and this variety has made for a rich experience revealing the possibilities and limitations of linking research, policy, and practice. The other means used by the NCCR North-South to establish links between research and other domains have been demonstration sites and projects, atlases, audio-visual productions, policy briefs, reports and guidelines in local languages, media coverage, and workshops with local communities and government officials, to name just a few.

In addition, the NCCR North-South's transdisciplinary approach has led researchers to involve a number of the stakeholders concerned in the process of assessing what problems should be researched and their vision of a more sustainable future. Getting non-academic stakeholders to participate in outlining this "target knowledge" has made it possible for the researchers to work on the "systems knowledge" related to the status and dynamics of the problems being investigated. Often, local people with indigenous knowledge can contribute to building up this "systems knowledge" (see Chapter 2.4). Finally, the various stakeholders have also been involved in probing "transformation knowledge," i.e. the kind of knowledge needed to move from the current, unsustainable situation to a more sustainable future.

The establishment of regional bodies – the RCOs and the RABs (see Chapter 4.6) – has been another important way of ensuring that the programme's transdisciplinary approach has been implemented, linking research, policy, and practice and making research relevant to society. The RCOs and RABs have been actively engaged in promoting coordination among the research community, development community, policy circles, and government departments. By defining their own regional research and communications strategies, and by initiating a South-South network, these bodies have strengthened both the focus and the reach of their linking activities.

5.4.3 Further recommendations

Research funding agencies need to go beyond consultancy research, which is limited by various weaknesses such as a lack of minimum research standards, weak methodology and conceptual framework, time constraints, and lack of independence. Indeed, addressing the challenges of global change and finding options for dealing with local problems in both developing and developed countries requires an approach that goes beyond consultancy work.

Future funding arrangements must bring together the research, policy, and development communities and encourage them to operate in interaction with one another. Moreover, development donors active in the South should acknowledge the role of research as a bridge between science and society and a powerful means of making development locally relevant, effective, efficient, and sustainable. At the same time, the research community should work closely with development donors and other stakeholders to jointly define research problems according to the principles of the transdisciplinary approach. This is an effective means of connecting science and society.

Partners implementing research often limit their activities to disciplinary research, which is indeed important but not sufficient to connect research and society. Moving beyond a disciplinary approach and engaging in interdisciplinary and transdisciplinary work will lead to more effective results.

Development-oriented partnership research should, by definition, support the development competencies of implementing agencies and local stakeholders through innovation and validation. The advantage of such an approach is that the ownership of projects, insights, and products is usually increased through the involvement of all the stakeholders concerned.

Research policy actors should be more assertive in supporting research that addresses societal challenges. So far, the role of these actors has been weak, especially in the South. They need

to strengthen their capacity to define an adequate research funding strategy, negotiate the allocation of funds, and provide an appropriate policy framework and institutional arrangements. They should therefore engage and coordinate with development donors, government planning commissions, and research councils to develop the necessary policy and regulatory framework.

Finally, research donors must accept that publishing in high-quality international scientific journals is only one way of disseminating research results and that it is used less in developing countries because of lack of access, the language barrier, and technical and other constraints. There are other ways of linking research with policy and practice; the success of a research project should therefore not be measured solely by the number and nature of academic publications.

5.5 The challenge of dealing with power asymmetries and promoting flexibility, transparency, and accountability

5.5.1 The challenge

Research partnerships between the South and the North inevitably operate in a context of power asymmetry in terms of resources, decision-making power, and access to knowledge sources and the scientific world. While development cooperation started dealing with the inherent North–South power asymmetry in development projects back in the first half of the 20th century, it took longer for donors and research actors to realise that there was a need to minimise the gap in the research sector as well. Research partnerships started being promoted as an alternative to performing the role of ‘classical donors’ (“this is our money and we determine what we feel is appropriate”) thirty years ago, i.e. as of the 1980s. But as Bradley stresses in her review of the literature: the “orientation of donor policies and the elusiveness of equitable collaboration between Northern and Southern researchers remain

deeply troubling issues for many observers” (Bradley 2007a:8–9). There is thus still a long way to go to modify the negative dynamics and impact of the power asymmetries inherent in North–South relationships, as these asymmetries pervade all levels of societal interaction, including the mind-frames with which each partner in a research partnership understands reality.

5.5.2 The NCCR North-South’s approach

As it relied on the KFPE principles (1998), the NCCR North-South tried from the outset to address such power asymmetries, but its members soon realised that the programme’s Northern-driven governance structure and procedures would have to be adapted to allow for more adequate representation of Southern members at the decision-making level (see Chapter 2.2). But had those involved not shown a willingness to engage with power issues and had they not had the prospect of being able to interact over the long term (see Chapter 4.1), this adaptability would not have been possible.

The review panel – a mixed body of experts who on an annual basis examine the orientation, planning, processes, outputs, and outcomes of the programme and suggest corrective measures – was instrumental in providing an outside view of the difficult issue of dealing with power asymmetries. As a result, guidelines and rules of procedure for various areas of the programme’s activities and structural issues were designed and adapted at regular intervals. These documents contain guidance and rules on promoting the goal of a North–South and male–female balance in many different areas: e.g. when choosing PhD candidates and post-docs, when designing training events and PAMS projects, when implementing the annual programme, when deciding on new research themes, etc. (see Chapter 4.7).

Most importantly, however, the composition of the BoD was modified to ensure that Southern partners had a better chance to suggest changes and thus reduce the impact of power asymmetries to a pragmatically acceptable level. In time, more authority and

responsibility was also delegated to senior researchers in the South – after they had been equipped with the required knowledge and skills for managing complex research projects.

In addition, the establishment of a performance-based system (requiring the monitoring of outputs agreed in advance) combined with the application of the self-reflective principle of mutual learning and adaptation, successfully promoted transparency, accountability, and flexibility within the programme. It is noteworthy that the NCCR North-South succeeded in conducting research even in politically insecure environments such as Côte d’Ivoire, Nepal, Ethiopia, Pakistan, Kyrgyzstan, and Kenya. According to respondents from these countries, the programme’s flexibility and adaptability were essential in maintaining research activities in times of turmoil.

5.5.3 Further recommendations

For donors from the development community, funding North–South research partnerships remains an essential means of addressing North–South power asymmetries in the research sector. In this respect, it is crucial to continue investing in capacity development, in particular to support Southern research institutions and ensure that they can train the next generation of researchers and provide them with the ability to conduct independent, societally relevant, and internationally competitive research. Investment in higher education and long-term research programmes in developing countries is key; but so is support for Southern governments at the policy level when it comes to developing the education sector and ensuring that national funding is available for tertiary education on the one hand, and research on the other.

For donors from the research community in the North, it is essential to be aware of North–South power asymmetries and to follow the principles and recommendations established by research project managers who have long experience in working in North–South partnerships. Flexibility, transparency, and accountability help

to promote the commitment of researchers and institutions in the North and the South; they also fuel their motivation and their ability to deal with power issues, ultimately strengthening joint ownership. Flexible arrangements need to be combined with transparent processes and accountability mechanisms. These do not develop over night and they depend on many contextual factors; hence, promoting an open attitude and a willingness to acknowledge errors and learn from them, ensuring the financial means and creating a climate of confidence to facilitate transparent, accountable, and flexible processes, are essential for all actors in research partnerships.

Research policy-makers can also learn from the development community, which has been exposed to the challenge of power asymmetries for many more decades than they have. In this respect the collaboration between the SNSF and the SDC is a very commendable example. So is the interaction of the SNSF and the SDC with the KFPE and high-level Southern researchers, who are regularly invited for consultations.

Finally, those who actually implement research – i.e. the research institutions and the researchers themselves – need to reflect on their own role and be constructive in dealing with power asymmetries. Proactive refining of institutional policies, strategies, and working procedures, and the empowerment of individual researchers, as illustrated in Chapter 2.5, are some of the ways that can be used to strengthen the ability to take up this difficult challenge in daily research interactions.

5.6 Concluding remarks

In the course of the extensive EPD survey conducted among the members of the NCCR North-South, we were struck by the energy that respondents were willing to invest in hard work and negotiations in order to achieve societally relevant research in partnership arrangements. Though a few respondents criticised individual aspects of the research partnerships, no-one expressed

fundamental doubts about the relevance of the research conducted by their partners, the importance of the network, and the approach chosen by the programme. It therefore seems logical to recommend that the successful aspects of the programme and the structures it has helped establish or consolidate should be sustained and replicated.

The NCCR North-South research approach is innovative in several unconventional ways for a research programme. For example, it strives to integrate a number of very different concerns such as academic capacity development at the individual and institutional level, research for sustainable development, multiple themes and disciplines, joint North–South management of the programme, and collaboration between very different partners – universities, research centres, think tanks, government offices, NGOs, local communities, and the private sector. The programme has also developed a component that enables researchers and societal stakeholders to engage in validating research results together, and to reflect on them in order to adapt them further in future: the PAMS.

In addition, the NCCR North-South has had the support of RABs, which are committed bodies of Southern experts who provide crucial scientific, policy, and institutional counsel for the eight regional research strategies. The programme also receives support from a panel of independent experts with representatives from the North and the South who have regularly provided a constructive critique of activities, structures, procedures, and planned projects. Finally, the long-term commitment (2001–2013) of the donors – the SNSF, the SDC, and the participating institutions (selected Swiss universities) – has provided an ideal context within which important scientific results have been developed and applied, and crucial experiences and lessons have then consolidated the network of those involved.

Expanding the contribution of the programme and benefiting from its experiences and lessons requires research policy-makers, development agencies, and research institutions to be willing to commit themselves to supporting the existing network beyond

the lifetime of the programme, taking into account the four points presented in the following paragraphs:

Engagement: one of the conclusions of this book is that research partnerships leads to achievements only if researchers engage continuously and constructively with one another and with other stakeholders, with an open mind; this requires time, effort, financial resources, and a robust conceptual and methodological framework. Conducting research for sustainable development takes longer than development interventions. This also needs to be taken into account by development agencies that support such research.

Holistic approach: the NCCR North-South experiences demonstrate that a holistic, or “transdisciplinary”, approach which brings key stakeholders together at important stages of research projects – i.e. when identifying the problems to be investigated, when taking strategic decisions regarding themes, partners, and geographical areas, and when validating research results – is an essential means of addressing the challenges of sustainable development. This is because such an approach complements interdisciplinarity by providing a framework and methodology for interacting with non-scientific stakeholders, which in turn is essential in trying to deal with the socio-cultural, environmental, and economic impacts of global change. This approach is relatively expensive in terms of time and effort, and this fact also needs to be taken into account by potential donors.

Openness and flexibility: developing mutual trust is a lengthy and complex process, but given sufficient time it leads to a congenial environment for research partnerships. Funding agencies often call for rapid and identifiable impacts and they tie their decisions about providing funding to such immediately visible results. This is not in line with the principles, procedures, and practices of partnerships that focus on development-relevant research. Learning from mistakes and achievements is a slow but crucial process of research partnerships. Hence, a certain flexibility on the part of funding agencies, research policy-makers, and research managers is necessary to boost the chances of success of a research

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The challenges posed by global change processes require concerted responses from the development, research, policy, and practitioners' communities in the global North and South. A means of developing the societally relevant knowledge and holistic understanding necessary to inform such responses is through research partnerships. Research partnerships between the North and South can ensure that context-specific knowledge is generated. Transdisciplinary research partnerships can help move societies in the South and North towards more sustainable development by establishing links between research, policy, and practice. Research partnerships are a promising path to a sustainable future, but establishing and maintaining them over great distances and cultural boundaries is not without challenges.

This book is based on experiences made during a 12-year research for development programme, the NCCR North-South. It highlights the factors determining the development of capacity in the South to produce knowledge for dealing with global change issues. It describes the programme's achievements, but also the challenges it faced and its innovative responses to these challenges. In short, this book makes policy recommendations on what it takes to make research partnerships between the North and South successful. As such, it is aimed at funders of research and of development interventions, policymakers, development practitioners, and researchers themselves.

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