

Maximising the Impact of Research: The NCCR North-South Approach

Fourth NCCR North-South Report on Effectiveness

Editors: Claudia Michel, Eva Maria Heim, Anne B. Zimmermann, Karl Herweg, Thomas Breu

NCCR North-South Dialogue, no. 48 2013

dialogue

Adolesce

The present study was carried out at the following partner institutions of the NCCR North-South:

Management Centre of the NCCR North-South, Centre for Development and Environment (CDE), University of Bern, Switzerland

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Sustainable Development Policy Institute (SDPI), Islamabad, Pakistan

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Cover photos

The NCCR North-South research project "Reproductive Resilience" aims at identifying and understanding supportive environments for youth. Using a participatory action research approach *(left)*, adolescents in Ghana and Tanzania were supported in making a film and producing a youth magazine *(right)* to share their experiences related to sexuality and teenage pregnancy. (Photos by Constanze Pfeiffer)

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Executive Summary

The Swiss National Centre of Competence in Research (NCCR) North-South is an international research programme on global change and sustainable development. One of its fundamentally important goals is to inform policy and practice with evidence. This report introduces the NCCR North-South approach to maximising research impact and explains **how to apply practical tools for analysing, maximising, and monitoring the impact of transdisciplinary research projects.** Six case studies illustrate how research impact can be maximised at different stages of research. This report is of interest to all researchers who wish to respond to policy and practice from their point of view and who are keen on publicising their evidence. It is also relevant for those who teach how to maximise research impact.

The study is part of a series of reports on effectiveness. The NCCR North-South series "Monitoring Research Effectiveness" (MORE) takes up topics of general interest and provides information on current debates on research evaluation and transdisciplinary research. MORE is a self-assessment and learning approach that aims at enhancing researchers' understanding of the various effects of their activities. The first report introduced our understanding of impact and for the first time provided an overview of 23 exemplary societal outcomes of the NCCR North-South (Michel et al 2010b). The second report (Heim et al 2011) presented an internal evaluation of one of the programme's most distinctive features, the Partnership Actions for Mitigating Syndromes (PAMS). PAMS are a funding scheme for supporting the collaboration between academic and non-academic stakeholders. The third report tracked the effect of the programme on the careers of 83 NCCR North-South alumni (Heim et al 2012). Finally, the present report – the fourth in the MORE series – explains our approach to maximising impact on the basis of conceptual arguments and with reference to case studies.

The results of this report grew out of a distant learning course and a conference session in 2012. The NCCR North-South Management Centre offered a webinar on "Impact of Research on Policy" facilitated by members of the Overseas Development Institute (ODI). Post-doc researchers were offered support for applying an impact approach to their research projects and they shared their experience of working with impact management tools. Later in the year, these researchers presented the results of their reflections in a special session of the International Conference on Research for Development (ICRD) in Bern, in August 2012. John Young, Director of the ODI programmes on Impact Assessment Partnerships, and Research and Policy in Development (RAP-ID), acted as discussant for each presentation. Based on the feedbacks received from participants at the conference, the researchers rewrote and considerably extended their papers for the present report.

The first chapter introduces the conceptual background of the NCCR North-South approach to maximising and assessing impact. It starts from the assumption that a meaningful approach needs to deal with a broad understanding of impact, complex environments, and the specificities of transdisciplinary research. Transdisciplinarity is an interface practice in which all phases of the research process work towards contributing to societal outcomes. In order to maximise impact, a novel approach from the Overseas Development Institute (ODI) was introduced, known as the RAPID Outcome Mapping Approach (ROMA). ROMA allows planning for influencing the behaviour of non-academic partners from the outset of a research project and supports continuous impact monitoring during all stages of research. The chapter discusses the experiences garnered by the NCCR North-South in applying ROMA.

This conceptual introduction is illustrated by six case studies presented in the subsequent chapters. These studies highlight important factors that need to be considered for progressing towards greater research impact. The research projects are located in Bolivia, Tanzania, Chad, Pakistan, Tajikistan, and Nepal, the topics range from disaster risk management, to health, forest management, mountain development, and migration. All projects are associated with the National Centre of Competence in Research (NCCR) North-South programme.

Chapter two illustrates the **process of planning impact.** It is a case study on how to integrate a gender perspective into disaster risk management in the city of La Paz, carried out by Luis Salamanca and Jimena Freitas (Universidad Mayor de San Andrés, Bolivia). Three chapters then deal with a crucial step of the planning process: selection of appropriate key stakeholders. Chapter three is about giving a voice to important but powerless stakeholders such as youth. The research project on reproductive resilience of adolescents in Ghana and Tanzania was led by Constanze Pfeiffer (Swiss Tropical and Health Institute, University of Basel, Switzerland) and Collins Ahorlu (Noguchi Memorial Institute for Medical Research, University of Ghana, Ghana). Chapter four points out the importance of selecting the right number of key stakeholders. The research project by Mahamat Béchir (Centre de Support en Santé Internationale, N'Djamena, Chad) and Esther Schelling (Swiss Tropical and Public Health Institute, University of Basel, Switzerland) worked towards improving access to social services for mobile pastoralist communities in the Sahel. Chapter five presents lessons learnt on how to mediate between stakeholders. The research project by Babar Shabaz (University of Agriculture, Faisalabad, Pakistan) and Talimand Khan (Sustainable Development Policy Institute SDPI, Islamabad, Pakistan) addressed forest governance in Northwest Pakistan. Chapter six is concerned with a particular difficulty in monitoring research interventions: tracking outcomes over the long term. The research led by Thomas Breu and colleagues (Centre for Development and Environment CDE, University of Bern, Switzerland) aimed at drawing plausible links between a research intervention and the course of development in the Tajik Pamirs. The last chapter provides a reflection on academic research from the point of view of impact creation. The research project by Anita Ghimire (Nepal Center for Contemporary Research, Kathmandu, Nepal) focuses on "Migration and Development" and examines the role of returnee students in making positive changes in Nepal.

This publication is a report on work in progress and we are interested in continuing our discussion of ways and means to maximise the impact of research. We therefore encourage readers to send us their critical readings of our report and to share their own experience of maximising impact with us.

1 Maximising the Impact of Transdisciplinary Research With a Novel Approach: ROMA (RAPID Outcome Mapping)

Claudia Michel, Simon Hearn, Gabriela Wülser, Thomas Breu

Interest is growing in the impact science can have on reducing poverty in the global South. If we understand impact as the "demonstrable contribution that excellent research makes to society and the economy",¹ the concept encompasses a variety of contributions of research-related knowledge and skills that benefit people and the environment. One reason for the growing interest in impact in this context is research councils' increasing focus on documenting the social and environmental benefits of science, as indicated by the above quotation form the British research councils.² Another reason is that research funding agencies from the private and public sectors are now more interested in social innovations for solving problems on the ground.³

According to the Overseas Development Institute (ODI), research can indeed influence policymakers horizons, policy development, declared public policy regimes, funding patters, and implementation or practice (Young 2005). This is promising for those who would like to improve – and prove – the influence that research can have on policy and practice. It is also of importance for better understanding the intended and unintended effects of research.

The relevant questions are: how we can improve impact and how we can assess whether it works.

1.1 The need to adapt to complex conditions

There is one answer for both questions: we need new approaches for maximising and assessing research impact. The standard models are inadequate for at least three reasons.

¹ More information on the British research councils' "Excellence with Impact" framework, see: http:// www.rcuk.ac.uk/kei/Pages/home.aspx; retrieved on 4 March 2013.

² Another example is research funded by the European Commission. Swisscore, the Swiss Contact Office for European Research, Innovation and Education, commented a trend towards placing innovation at the forefront: "Realising that Europe leads in basic research, but fails at bringing research results to market, the European Commission (EC) strongly insisted on setting the focus on innovation for the next Framework Programme for Research and Innovation Horizon 2020". Retrieved 7 March 2013 from: http://www.swisscore.org/SiteCollectionDocuments/Newsletter/syn_syn_1302.pdf

³ An example is the 12-year NCCR North-South programme, which is jointly financed by the Swiss National Science Foundation (SNSF), the Swiss Agency for Development and Cooperation (SDC), and the participating institutes. From the beginning SDC emphasised that societal and environmental impacts of research should be assessed and documented; the present report is one of the results of this monitoring.

First, we need to adapt to a new and very broad understanding of impact. In the past, research impact was often equated with value creation, aiming at increased productivity and profits. Ultimately, the growth and competitiveness of national economies should be stimulated. Claire Donovan argues that for capturing broad societal benefits, approaches need to go beyond economic data and science and technology innovation indicators. "This entails that metrics-only approaches are behind the times, and that state-of-the-art evaluations of research impact combine narratives with relevant qualitative and quantitative indicators" (Donovan 2011, p. 176).

Second, assessing the impact of research for poverty reduction requires an approach that takes complexity into account. There are multiple and highly interrelated factors causing poverty. Issues such as migration, violence, health problems, and environmental and social change have social, economic, and ecological roots that are often poorly understood. Policy processes for combatting poverty take place at the global, national, and local levels, and these are not always in line (Leach et al 2012). A broad range of actors intervene in policymaking. Very often, there is no common view of what the problem actually is, and many actors are potentially affected by decisionmaking (Wuelser et al 2012). There might be different views of how to solve problems, and policy decisions need to be taken under conditions of uncertainty (Datta 2012). Finally, both poverty itself and decision-making for combatting poverty are highly context specific (Honadle 1999). Standard models for assessing research impact are not sufficiently flexible to adapt to these complex conditions.

Third, research paradigms that work towards closing the gap between science and society have a high potential for generating benefits for the public. But assessing these benefits is tricky. Indeed, these research paradigms have different labels: for instance, participatory research, interactive or community-based research, policy analysis, etc. (Pohl and Hirsch 2007; Talwar et al 2011). What they have in common is that they work, first, with specific forms of cooperation between researchers and users, second, with the perspectives of the different disciplines involved, and third, with modes of integrating evidence into society and academia (Bergmann 2007). By contrast with standards models that focus solely on measuring the integration of evidence into society, an impact approach needs to capture all three elements mentioned above.

1.2 Transdisciplinary research

Working at the interface of science and society, transdisciplinarity is an approach to research that appears promising in this regard. Transdisciplinary research aims to contribute to science in terms of new findings, and to society in terms of practical and acceptable solutions for persistent and complex problems. To this end, it involves academics from different disciplines, as well as non-academic stakeholders such as policymakers, economic actors, and community members. All actors contribute to the research process from the very beginning because "[t]ransdisciplinarity implies that the precise nature of a problem to be addressed and solved is not predetermined and needs to be defined cooperatively by actors from science and the life-world. To enable the refining of problem definition as well as the joint commitment in solving or miti-

gating problems, transdisciplinary research connects problem identification and structuring, searching for solutions, and bringing results to fruition in a recursive research and negotiation process" (Wiesmann et al 2008). The classical conception of a linear process from scientific evidence to knowledge transfer and use of research results is replaced by a process of co-production of knowledge among all actors.

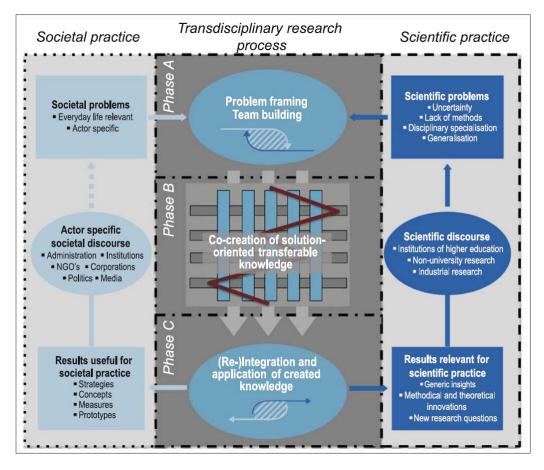


Figure 1: Conceptual model of an ideal-typical transdisciplinary research process. (Source: Lang et al 2012, p. 28. Reproduced with kind permission of the publishers and authors)

Figure 1 visualises the three phases of a transdisciplinary research process in a recent review of previous conceptualisations of this process (Lang et al 2012). Lang and coauthors define transdisciplinary research as an "interface practice" that connects societally relevant problems with research questions, thus closely following definitions proposed earlier by Pohl and Hirsch Hadorn (2007), Wiesmann et al (2008), and Talwar and colleagues (Talwar et al 2011). The benefits of such an approach are twofold: it provides new options for solving societal problems, and new approaches, methods, and insights for science. The ideal-typical conceptual model foresees three phases:

1. **Problem framing, teambuilding:** The problem is jointly identified and described from a scientific perspective by academics and from a practical perspective by non-academic stakeholders. It is often challenging to agree on a problem definition that is both researchable and meaningful for science and society.

- 2. **Co-creation of solution-oriented transferable knowledge:** The second phase is about joint data collection and interpretation. Academic and non-academic stakeholders need to agree on the degree of collaboration in the process of creating knowledge that is both solution-oriented and compatible for different disciplines.
- **3.** (**Re-)integration and application of created knowledge:** The last phase is dedicated to the process of integrating and applying the knowledge in science and society. "As different perspectives, world views, values, and types of knowledge are integrated over the course of the entire transdisciplinary research process, this phase is not a classical form of knowledge transfer from science to practice" (Lang et al 2012, p. 28). Both tangible and less tangible outcomes are important. A tangible product might be an evidence-based strategy, a prototype, or a new method for data collection. A less tangible product could be enhanced awareness or an intense learning process. It is wise to be open to emerging outcomes and not to stick narrowly to the original objectives. The "centralised steering idea has to be questioned and, in many cases, be replaced by the metaphor of an ongoing learning process" (Lang et al 2012, p. 28).

The model presents the phases as a linear process. But in reality, the research process is an iterative and recursive cycle, connecting the phases according to the requirements of both problem solving and scientific innovation.

The ideal-typical model of a transdisciplinary process shows that societal outcomes are at the heart of transdisciplinary research. The question remains: what instruments do we have to maximise and better observe outcomes?

1.3 A novel approach to impact: the RAPID Outcome Mapping (ROMA) approach

RAPID Outcome Mapping (ROMA) is a novel approach for analysing and maximising research impact in the complex environment of developing countries (Young and Mendizabal 2009). Developed by the Overseas Development Institute (ODI) with the aim of helping researchers to engage in evidence-informed policymaking, the approach is strongly shaped by concepts of complexity. It is an adaptation of Outcome Mapping – an approach to planning, monitoring, and evaluating development projects and programmes (Carden 2009; Earl et al 2001) – and adopts many of the principles of the approach, such as the understanding of outcome as "changes in the behaviour, relationships, activities or actions of the people, groups and organisations with whom a programme works directly" (Earl et al 2001, p. 1). Outcome Mapping posits that development is essentially about people relating to each other and their environment,⁴

⁴ As Annette Boaz mentions, there are multiple terms to describe research impact such as impact itself, but also outcome, benefit, payback, translation, transfer, uptake, and utilisation. We refer to the International Development Research Centre's definition of outcomes as behavioural change. To simplify things from a language point of view, we also use the term impact. "These different terms have a shared interest in change that lies beyond the research process and its primary outputs" (Boaz et al 2009, p. 256)

and ROMA applies this to research by focusing the researcher on the non-academic partners with whom they anticipate opportunities for influence.

ROMA aids in planning strategies for influencing the behaviour of non-academic partners from the outset of a research project; it also supports continuous monitoring of results during all stages of research. ROMA provides a framework consisting of seven steps and associated tools which help researchers to gradually plan and pursue their policy objectives (Figure 2).

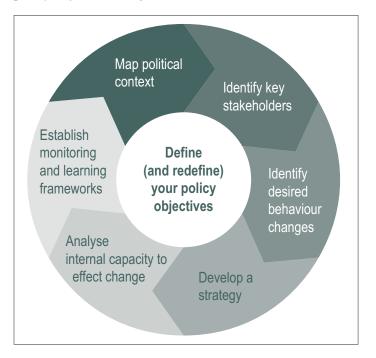


Figure 2: The RAPID Outcome Mapping Approach (ROMA). (Source: Young and Mendizabal 2009, slightly adapted. Reproduced with kind permission of the authors)

Researchers who want to maximise the impact of their research should consider the following important steps:

- **Define your policy objectives:** Researchers need to be conscious about the changes they aim to achieve. Therefore, these changes should be written down and subjected to continuous revision. Policy changes are understood in a very broad sense as discursive, procedural, content, attitudinal, and behavioural changes (Young and Mendizabal 2009). We also refer to Tim Clark who defines policy as plans and principles for action designed by and for any kind of societal actors (Clark 2002).
- **Map the political context:** What are the key factors that may influence the issue? ODI has developed an analytical and practical framework to identify these factors (Court et al 2005): the key factors of the framework are the political context, the quality and relevance of the scientific evidence, the links between various actors, and the external factors (e.g. changed international agendas, unexpected political changes in another country) that need to be considered.

- **Identify key stakeholders:** Key stakeholders are those non-academic actors whom researchers are seeking to influence. ODI refers to policy stakeholders such as parliamentarians, ministers, and policy think tanks. In the context of this study we apply a broader understanding of the term stakeholder, including all development actors such as local communities, farmers' associations, NGOs, and others. In order to identify the key stakeholders, researchers need to assess the alignment, interests, and power of stakeholders. Stakeholders who agree with the researchers' objectives, have a strong interest in the results, and a lot of power to make changes happen are very important.
- Identify desired behaviour changes: A central step is the formulation of a theory of change. Researchers should describe as precisely as possible the ideal behaviour of their non-academic partners that will make them progress towards the policy objectives. The description should include the short- and medium-term changes, known as 'Progress Markers'. These indicators "can be monitored to ensure that the priority stakeholders are moving in the right direction and responding to the efforts of the programme" (Young and Mendizabal 2009, p. 4). Progress Markers, mostly of a qualitative nature, show the complexity of the change process for each partner, from early positive responses through to transformative change.
- **Develop a strategy:** Based on the theory of change, researchers need to develop a strategy regarding how to exert influence on the key stakeholders. This should include the definition of activities, alliances, and milestones.
- **Analyse internal capacity to effect change:** The next step is the analysis of the researchers' competencies to implement the strategy. "Competence is an evolving set of systems, processes, and skills that enables actors to make the right decisions and act accordingly" (Young and Mendizabal 2009, p. 4).
- **Establish monitoring and learning frameworks:** Finally researchers need to monitor the changes and learn from what happens. The monitoring and learning system tracks the progress of the key stakeholders and assesses whether researchers act effectively. In addition, it supports researchers in their efforts to understand the unexpected outcomes of their activities and to adapt to the changes and gradually learn how to maximise their influence. Monitoring is a practice of generating new knowledge, questioning assumptions, planning and motivating future activities, and building analytical capacity.

In sum, the first steps of the ROMA approach suit the need to plan for impact, while the last step is about monitoring and assessing the changes.

1.4 Applying ROMA to transdisciplinary research partnerships in the NCCR North-South programme

The ROMA approach has been applied in the NCCR North-South programme on various occasions. The National Centre for Competence in Research (NCCR) North-South is an international programme working on the basis of development-oriented research partnerships between Swiss universities and partners in Africa, Asia, and Latin America (Hurni and Wiesmann 2010; Wiesmann and Hurni 2011). With a network of more than 350 researchers active in about 40 countries, this programme is dedicated to addressing global change and sustainable development issues. Topics such as livelihoods, institutions, conflicts, health, sanitation, economy, governance, and sustainable use of natural resources are explored.

A group of researchers of the NCCR North-South jointly reflected on the benefits and limits of applying the ROMA approach to their research projects. A webinar was held on the "Impact of Research on Policy", facilitated by ODI staff, and results were discussed during an international conference in 2012 (NCCR North-South 2012). The post-doc research projects discussed in this context were located in Bolivia, Tanzania, Chad, Nepal, Pakistan, and Tajikistan, and the topics ranged from disaster risk management to health, migration, forest management, and mountain development. The projects were comparable despite this geographical and thematic diversity, as they had a common research design: all projects addressed socially relevant problems and involved stakeholders repeatedly and intensely in the research process; and all researchers actively worked towards achieving impacts.

Results show that the transdisciplinary approach of the NCCR North-South resonates in many ways with the goal of the ROMA approach. The transdisciplinary paradigm ensures that collaboration between researchers and user is sought, from the formulation of the problem to the analysis and interpretation of results. ROMA provides operational tools for influencing policy and practice as well as for tracking outcomes. It contributes to the goals of transdisciplinary research in particular in the phases of strategic planning of impacts and monitoring of and learning from impacts.

Tensions were also identified between transdisciplinarity and the ROMA approach. One is that the main goal of ROMA is impact while transdisciplinary research strives for various achievements, and impact is only one among these. Another is that transdisciplinarity is oriented towards co-production of knowledge among participating stakeholders, while the ROMA approach is more oriented towards effecting changes in the behaviour of the key stakeholders. These different goals need not, but may, conflict depending on the context and the stakeholders involved.

The ROMA approach motivated the researchers to reflect on how research-based evidence can inform development policy and practice. As some said, ROMA enabled them to rapidly identify their objectives in terms of influencing policy and to present key findings to policymakers in a comprehensible way. It helped them structure ideas, emphasise the role of stakeholders, and focus on outcomes. Many felt that the approach supported them in better translating research into action for the benefit of their partners. Defining stakeholders' ideal practice of change, however, turned out to be among the most challenging steps to implement. Despite the fact that transdisciplinary researchers are trained in focusing not just on generating scientific knowledge but also on collaboration with non-academic stakeholders (Pohl 2008), and although they are used to assuming different roles when engaging with users of research results (Pohl et al 2010), many found this task difficult. What clearly emerged from our collective reflection was the need for a stronger engagement between research evaluation specialists and the academic community.

1.5 Outlook

This conceptual introduction is followed by six case studies that illustrate a self-reflection using the ROMA approach in the following chapters. These highlight important factors that need to be considered for progressing towards research impact. As mentioned above, the research projects are characterised by diversity: they are located in Bolivia, Tanzania, Chad, Pakistan, Tajikistan, and Nepal, and the topics range from disaster risk management to health, forest management, mountain development, and migration. All projects were conducted within the programmatic framework of the National Centre of Competence in Research (NCCR) North-South.

Chapter two illustrates the process of planning impact. It is a case study reflecting on the integration of a gender perspective into disaster risk management in the city of La Paz, carried out by Luis Salamanca and Jimena Freitas (both at the Universidad Mayor de San Andrés, Bolivia). The researchers' policy objective was to help key stakeholders to integrate a gender perspective in disaster risk management at the levels of the relevant law, of management, and of daily practices. The paper documents the choices made by the researchers when selecting key stakeholders and formulating a theory of change.

Three chapters then deal with a crucial step of the planning process: the selection of the right key stakeholders. *Chapter three* is about giving a voice to important but powerless stakeholders, such as youth. The research project on reproductive resilience of adolescents in Ghana and Tanzania, led by Constanze Pfeiffer (Swiss Tropical and Health Institute, University of Basel, Switzerland) and Collins Ahorlu (Noguchi Memorial Institute for Medical Research, University of Ghana, Ghana), helped young people to visualise their sexual and reproductive health realities in short films. A multistakeholder workshop was organised, bringing together young people and relevant stakeholders from the government, NGOs, and international donors for the first time. The paper discusses the outcomes of this workshop as well as similar activities that followed in Ghana.

Chapter four points out the importance of selecting the right number of key stakeholders. The research project by Mahamat Béchir (Centre de Support en Santé Internationale CSSI, Chad) and Esther Schelling (Swiss Tropical and Health Institute, University of Basel, Switzerland) aimed to improve mobile pastoralist communities' access to social services in the Sahel. Their "health of nomads" programme demonstrated the

possibility of combining health services with veterinarian services, thereby improving the health of nomads considerably. The researchers collaborated with various communities, several ministries of the Chadian governmental, and with NGOs. Researchers acted as campaigners, project managers, and agents of change. However, moving between various roles and dealing with a broad range of stakeholders turned out to be overly demanding. The paper discusses the difficulties as well as possible ways out and lessons learnt.

Chapter five presents lessons learnt regarding how to mediate between stakeholders. The research project by Babar Shabaz (University of Agriculture, Faisalabad, Pakistan) and Talimand Khan (Sustainable Development Policy Institute SDPI, Islamabad, Pakistan) addressed forest governance in Northwest Pakistan. Forest use in this area is driven by diverging interests. In the conflictive situation, researchers provided a neutral platform for stakeholders to meet and discuss possible solutions. The process started from the grassroots level with forest communities and later included members of the parliament, the administration, and journalists. The paper talks about how this approach encouraged forest communities to voice their own viewpoint and helped to put into perspective the widespread opinion of policymakers that common people often do not have a rational argument for policy change.

Chapter six is concerned with a particular difficulty in monitoring research interventions: the tracking of outcomes over the long term. The transdisciplinary research project led by Thomas Breu and colleagues (Centre for Development and Environment, University of Bern, Switzerland) aimed at drawing plausible links between a research intervention and the course of development in the Tajik Pamirs. The aim of the Pamir Strategy Project was twofold: to improve living conditions and develop a new methodological approach to mountain development. The central event of the project was a four-day multi-level stakeholder workshop that brought together 80 participants in October 2002. The participants – local communities, NGOs, and district- and national-level government bodies – were expected to later integrate the results and approach in their institution. Chapter six describes the limits and potential of a review 10 years after.

Finally, *Chapter seven* provides a reflection on academic research from the point of view of impact creation. The research project led by Anita Ghimire (Nepal Center for Contemporary Research, Kathmandu, Nepal) focused on 'Migration and Development' and examined the role of returnee students in making positive changes in Nepal. One of the major questions was to understand how to enhance the environment in such a way that students who returned after completing their education abroad could use their knowledge and skills in Nepal. The paper talks about how the ROMA approach was applied to the project and how it influenced the researchers and other stakeholders involved to think differently about how to make a difference.

2 Integrating a Gender Perspective Into Disaster Risk Management in the City of La Paz

Luis Salamanca, Jimena Freitas

2.1 Context and policy objectives of the research

The city of La Paz, from its foundation, has suffered from soil instability problems due to its geological, geo-technical, and topographic features, and its development on high slopes. In addition, the city's development is characterised by rural–urban migration processes, rural vulnerability, urban sprawl, and development models that exclude the poor. This has exacerbated the impact of natural risks such as floods and landslides (Figure 3). Although Bolivia has national laws that govern risk management, these are often not known or applied by municipal authorities and communities because they were made in a top-down way. Though some communities promote risk management actions, these are still mostly characterised by reactive actions, even at the prevention stage.



Figure 3: Urban dweller in front of what remains of her home, which was totally destroyed by the dramatic flood that hit the city of La Paz in February 2011. (Photo courtesy of Gobierno Autonomo Municipal de La Paz [GAMLP])

The last devastating landslide that hit La Paz occurred in February 2011 (Figure 4). It caused costs of about 93 million US\$, destroyed an area covering 140 hectares, affected 6000 people, and destroyed 1000 homes. Fortunately, there were no fatalities because the land slid slowly and people managed to escape and save their lives. But to this day, many victims are still living in tents and provisional dwellings, suffering from the aftermath of the disaster in many ways.



Figure 4: The 26 February 2011 megadeslizamiento, a big landslide that devastated large parts of the city of La Paz. *Left:* the area before the catastrophe; *right:* the area afterwards. (Photos courtesy of Gobierno Autonomo Municipal de La Paz [GAMLP])

Over the past ten years, three studies were carried out in La Paz with the aim to better understand how to protect the urban population from disasters. The first one (2004–2009, funded by the NCCR North-South), focused on understanding the perceptions of women and men related to disasters, risks, hazards, and vulnerability, and to explore how they build their resilience before natural disasters. The second (2011, funded by Oxfam) assessed what activities the state could develop to provide an answer to disasters. The third – a pilot study partially financed by Oxfam – identified the behaviour of the vulnerable population from a gender perspective, assuming that women and men are affected in different ways during and after disasters, and that they are not involved in prevention measures in the same way as men.

The studies showed that 36 neighbourhoods in La Paz are prone to multiple risks today, and a total of 70% of the city area should not be constructed at all. They provided evidence that men and women, mainly those subjected to multiple forms of marginalisation and discrimination due to their migration or ethnic background, are affected differently by disasters than others. Most of the really vulnerable population, e.g. members of female-headed households, are living in the most risky areas, and are therefore more often affected by natural disasters. When they are rescued and live in camps, they face additional problems (Figure 5). They have less access to social and economic resources, risk sexual harassment, and often have to abandon their wage labour for family reasons (Salamanca 2010; Salamanca et al 2012).

The research aimed at promoting a process to foster activities based on local players and researchers' know-how. The researchers' policy objective was not only to show where the current risk disaster management of La Paz lacked a gender perspective. Their aim was also to further help key stakeholders integrate the gender perspective in disaster risk management at the level of the law, of disaster prevention and management, and of daily practices.



Figure 5: Life in the camp in La Paz, 2011. In most families, women are responsible for keeping the family together. They cook, wash, and keep the camp area clean. (Photo courtesy of Gobierno Autonomo Municipal de La Paz [GAMLP])

2.2 Identifying key stakeholders

In order to influence future disaster risk management, the researchers first had to identify the most relevant actors. They performed a multi-scale analysis during the phase of data collection. The researchers conducted interviews at the national level with the vice-ministry of civil defence, at the subnational level with authorities of the municipality of La Paz, at the community-level with neighbourhood leaders *(juntas vecinales)*, and at the level of vulnerable areas with individuals. Based on the interactions with interview partners during data collection, and on the analysis and interpretation of results, the researchers decided to target the following groups:

• Vice-ministry of civil defence: The vice-ministry of civil defence is responsible for the reformulation of the law on disaster risk management (Ley 2140 para la Reducción de Riesgos y Atención de Desastre y/o Emergencias). Law #2140, established in 2000, is currently under consultation. In particular, the vice-ministry is collecting suggestions from municipalities and regional actors for better adapting the legal framework to local and regional realities. The legal reform process is opening a space for debate and offering opportunities for researchers to inform political decision-making with evidence from the field. It is a unique opportunity to integrate a gender perspective into the national norms concerning disaster risk management.

- **The Municipality of La Paz:** The municipality of La Paz has integrated a gender perspective in certain sectors such as violence, family, and intergenerational issues, but not in disaster risk management. But the administrative bodies have the possibility of mainstreaming gender in new areas. This could happen at the level of small projects as well as at the level of the overall process of urbanisation. Therefore, the municipality is a key actor for a gender perspective in disaster risk management.
- **Neighbourhood associations** *(juntas vecinales):* The municipality interacts with the urban population through neighbourhood associations. Neighbourhood associations are responsible for the development of their area. They decide how to shape the public space based on an annual budget of about 25,000 US\$/year. Most neighbourhood associations are heavily male dominated, which is one reason among others why priority is given in many areas to buildings and other structural work that often does not serve women's needs. For example, many neighbourhood associations invest in stairways that connect their area with the upper hills. But women and girls would often prefer to have new water tanks closer to their homes, as they are responsible for fetching water, which is located down at the river. The neighbourhood association, therefore, is a key player for reducing the daily risks and burdens that women are exposed to.
- Women affected by disasters: The research showed that very often, women and children who experienced loss of their homes or incomes through disasters are left alone. When resources are distributed and services provided by the municipality, in the best case they receive gendered services (e.g. provision of napkins for babies). But women are not supported when it comes to enhancing their economic, social, and political capacities. They generally suffer from the patriarchal structures that rule Bolivian society. Therefore, they are the most important persons to target when it comes to improving individual's and relatives' livelihoods.

2.3 Identifying desired behaviour changes

For each key stakeholder, the researchers identified desired behaviour changes based on their research insights. This also implied that the researchers reflected on their own intentions regarding how to influence non-academic actors. How did they want them to behave in future as a consequence of the research conducted here? How should they change their actions, activities, and relationships? Making the researchers' expectations explicit was helpful for planning collaboration with the users.

The researchers defined practices they thought should be applied in future, differentiating between short-term, medium-term, and long-term changes for each key stakeholder:

• Vice-ministry of civil defence: This stakeholder is expected to integrate a gender perspective in law #2140 in the long term. This implies that the authorities responsible become conscious of the need to focus on humanitarian assistance and the protection of vulnerable groups while preparing the reformulation

of the law. It means in the short term that vulnerable groups, gender representatives, researchers, and NGO experts such as Oxfam, Consorcio de Agencias Humanitarias de Bolivia, CARE international, and other organisations are invited to participate in the consultation. In the medium term, the Vice-ministry is expected to reformulate law #2140 according to the suggestions emerging from these consultations.

- **Municipality:** The municipality is expected to manage disaster risk management from a gender perspective. For the short term early activities could be made with the risk management unit and the Oficialía de Desarrollo Humano of the administration. Small projects would help to sensitise municipal members and train the staff. In the medium term, sex-disaggregated data should be made available for a better understanding of the spatial distribution of the population, the development of housing, and the specific risks women and men are exposed to in the city of La Paz. Engaging with these studies should pave the way to move the current disaster risk management approach away from a limited focus on construction work to a broader perspective on urban trends.
- Neighbourhood associations: The neighbourhood associations are expected to prioritise the protection of vulnerable groups, among others, women. This means in the short term that women (and other vulnerable groups) should participate in the activities of the neighbourhood associations and are capable of influencing the development of their neighbourhood. In the medium term it implies that women should be empowered and become members of the neighbourhood associations. A gender-balanced decision body could be an important step towards a more sustainable development of the area.
- **Women affected by disaster:** Affected women are expected to make use of their rights, in particular the right to participate in decision-making. This means in the short term that women should have an interest in understanding how to make use of their rights. In the medium term they should be enabled to channel their needs through the relevant associations, for example the neighbourhood associations or their own women's organisations.

2.4 Researchers' strategies for influencing policy and practice

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The researchers developed their strategy for influencing policy and practice based on the expected changes in behaviour. As a first step, they decided to prioritise the consultation process regarding law #2140 on disaster risk management. The current consultation at the national level is a window of opportunity that draws the attention of a broad range of actors and allows like-minded organisations such as Oxfam and others to gain strength. Due to earlier collaboration with the vice-ministry on disaster risk issues, Luis Salamanca has been mandated to contribute to the preparation of the consultation. This position has allowed him to emphasise gender issues on various occasions of the process.

3 "We Have a Lot to Tell You!" Bridging the Gap Between Youth and Decision-makers

Constanze Pfeiffer, Richard Sambaiga, Alice Mbelwa, Collins Ahorlu, Eva Maria Heim, Boniface Kiteme, Brigit Obrist

3.1 Context and policy objectives of the research

In today's world, one person in five is between the ages of 15 and 24 years. In Tanzania, 23% of the population are adolescents, ranging from 10 to 19 years (UNICEF 2011). Although young people hold the key to the future, they face multiple and complex challenges (Figure 6). A key concern is their sexual and reproductive health (Figure 7). Adolescent pregnancy exposes young women to medical, social, and economic risks: indeed, they have a high risk of dying in childbirth, of being socially excluded by the family, the school, and their peers, and of living in poverty as single mothers.



Figure 6: Youth presenting their short films to policymakers and practitioners in Dar es Salaam. (Photo by Constanze Pfeiffer)

Tanzania has spearheaded many efforts to better understand and improve the sexual and reproductive health of young people in sub-Saharan Africa. However, to create interventions that will effectively steer young people towards responsible parenthood, more knowledge is needed about their capacity to withstand adversities and the social environment within which they can best develop this capacity.

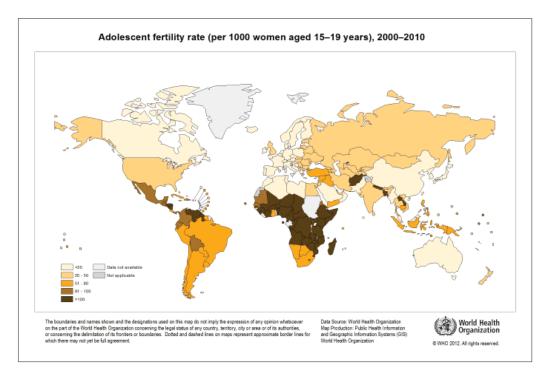


Figure 7: Adolescent fertility rate (per 1000 women), 2000 – 2010. (Source: WHO 2010, http:// gamapserver.who.int/mapLibrary/Files/Maps/Global_maternal_health_adolescent_fertility_2000_2010.png)

The NCCR North-South-funded project "Reproductive Resilience of Adolescents in Ghana and Tanzania" aimed at learning more about adolescents' capacity to deal with threats related to teenage pregnancy, and at identifying factors that can contribute to building their resilience. Using a transdisciplinary approach, stakeholders at all levels were regularly informed about the project, its activities, and findings. During project implementation and dialogues with youth on the one hand, and policymakers and practitioners on the other, it became clear that research findings and policy implications are still mainly discussed at the meso and macro levels, involving representatives from research institutions, and non-governmental, governmental, and donor organisations. However, the end users of development interventions – in this case young people – rarely participate in multi-stakeholder dialogues. Youth are often regarded as objects and not subjects of their own actions. In the past two decades, youth involvement in interventions has gained in popularity and youth are now increasingly viewed as assets and resources rather than as delinquents whose behaviour needs to be modified or prevented (Flores 2008).

In order to gain more vivid insights into young people's realities and to involve them in a multi-stakeholder dialogue, a Partnership Actions for Mitigating Syndromes (PAMS) project was implemented from January 2011 to December 2011. The project aimed at giving youth a voice by empowering them to speak out and visualise their Sexual and Reproductive Health (SRH) realities in short films. Often youth are regarded as victims; the PAMS project wanted to highlight youth's capacities and competencies and involve them as active agents of change. At the same time it targeted policymakers and practitioners from the Ministry of Health and Social Welfare, the Ministry of Education, and international and national non-governmental and donor organisations that shape adolescents' policies and interventions.

Using a participatory action research approach, 18 male and female adolescents aged 15–18 years from two secondary schools in one Tanzanian urban setting (Msimbazi Secondary School in Dar es Salaam) and one rural setting (Umoja Secondary School in Mtwara Town) were invited to discuss and identify (1) what they regard as key reasons for teen pregnancy, and (2) their main sources of information on how to avoid teenage pregnancy. Building on the discussions, the involved youth planed, scripted, and acted in role plays about these topics in videos with the facilitation of the Kenya/Swiss-based video producers Videmus, in collaboration with Matatizo Production Company, Tanzania.

3.2 Researchers' engagement with key stakeholders

To ensure that the videos reached key audiences, a multi-stakeholder workshop was organised that brought together youths and relevant stakeholders, such as government representatives, national and international NGOs, and international donors. The young video-makers were invited to present their clips and speak directly to policymakers. It was one of the first events in Tanzania that facilitated direct communication and interaction between actors at different levels: affected youth at the local micro level, NGO representatives at the meso level, and policymakers at the macro level.

One key message of the young people involved was that the locally produced youth magazines by the largest local multimedia civil society organisation Femina/HIP working with young people in Tanzania are a key source of information on sexuality and teenage pregnancy for them. Their videos further showed that many parents or other care-givers who are traditionally not primary educators on sexuality are increasingly being approached by their sons and daughters. However, they are often overwhelmed by their new roles and lack effective communication skills on sexual matters.

3.3 Outcomes: stakeholders' changing practices

An evaluation conducted at the end of the multi-stakeholder workshop showed that 100% of the participants found the workshop interesting, 75% gained new insights, and 67% stated that the discussions and results of the workshop will influence their work.

Through the videos, the youths themselves became the protagonists of a campaign to improve their lives. In the weeks following the workshop, the young people were invited by several non-governmental and donor organisations who had participated in the workshop to speak about their experiences. Various international and national NGOs and donors have expressed great interest in the videos. Femina/HIP started using the videos in their youth clubs as a basis for discussions. Several Tanzanian TV stations also aired them and the press reported on it (Figure 8). The Swiss Agency

for Development and Cooperation (SDC) agreed to finance screenings of the videos during outreach activities of Femina/HIP in four districts in Tanzania, inviting the young video-makers to participate as agents of change.



Figure 8: Article published about the workshop with youth and decision-makers in *The Citizen*, one of Tanzania's best-known English newspapers. (Source: Mirondo Rosemary, Traditional rites blamed for teen pregnancies, *The Citizen*, Local Feature, 16.05.2011

Building on the findings of the project, another PAMS was implemented in Ghana, where youth magazines informing readers about reproductive health do not exist. An education and entertainment project supported by the Adolescent Health and Development Programme of the Ghana Health Services enabled young people to inform their peers about sexual and reproductive health issues. This project was implemented bearing in mind that young people need to be listened to in order to inform policymakers and practitioners about efficient and appropriate project designs for sensitisation. Ghanaian youth have very little or no platform to share their experiences and be heard. To address this, an education and entertainment magazine project was piloted. Thirty students from two senior high schools in Accra planned, designed, and produced four editions of edutainment magazines to inform their peers about sexual and reproductive health issues. Articles published in the magazine were developed mainly by adolescents who shared their experiences and offered advice to their peers.

The magazine was well received by stakeholders. Over 500 students, officials from the ministries of education and health, and NGO representatives attended the launching ceremony of the first edition. The magazine is being used to initiate sex education, especially about teenage pregnancy and its related dangers in junior and senior high schools in and around Accra. The magazine has brought to the fore that young people in Ghana have a great deal of experiences to share that can inform policy and practice.

3.4 Plausible links between researchers' engagement and outcomes

From the beginning of the NCCR North-South project on "Reproductive Resilience of Adolescents in Ghana and Tanzania", relevant policymakers, practitioners, and researchers in the field of sexual and reproductive health were identified and provided with continuous updates about the background, activities, and findings of the project. A series of workshops and exchanges with key players created a basis for trust and successful interaction. This interaction gained in importance with the involvement of youth. Direct interaction with youth and their representations of health realities reached the stakeholders in a much more appealing way. Resource-intensive networking activities that often went beyond the scientific realm were clearly essential in exchanging with policymakers; but it also became clear that it is equally important to choose the right means of communication carefully if one wants to really reach policymakers and practitioners. Involving both decision-makers and potential beneficiaries – in this case adolescents – in an interactive visual project allowed for new ways of expressing different voices. The video films attracted decision-makers and cleared the way for a committed and respectful dialogue between different stakeholders on a face-to-face basis.

In addition, the dialogue process was complemented by policy-oriented publications that presented additional qualitative and quantitative project-related research results to all actors involved. A policy brief on the key findings in Tanzania (Pfeiffer et al 2012b) and an NCCR North-South Outcome Highlight publication (Pfeiffer et al 2012a) summarising the lessons learnt from the video project with youth can be downloaded at: www.socialresilience.ch/reproductive-resilience/

Apart from project-related efforts, a supportive environment is crucial as well. In Tanzania, two factors facilitated productive exchange among all stakeholders:

- 1. Sexual and reproductive health of adolescents is gaining in importance in Tanzania as it moves up on the international and national agenda; and
- 2. Recently thanks to the initiative of a few active international and national experts working in this field a strong network was formed that allows different stakeholders to exchange ideas and to support each other in pushing new policies forward.

Both aspects form the institutional basis that allows for change. The combination of project-related efforts and external factors such as the ones described above go hand in hand. The sustainability of these processes, however, remains a continuous challenge and depends on the people in power and on their interests as well as dedication.

4 Improving Mobile Pastoralist Communities' Access to Social Services in the Sahel

Mahamat Béchir, Esther Schelling, Daugla Moto, Jakob Zinsstag

4.1 Context and policy objectives of the research

In the Sahel and particularly in Chad, mobile pastoralist communities hardly have access to social services and particularly to health care. These communities are composed of nomads with no permanent homes at all, semi-nomad pastoralists moving between their village and pastures, and transhumant pastoralists moving between regions according to the season. Within these communities, women and children are the most vulnerable to exclusion. Under-five child mortality is as high as 61/1000 (Weibel et al 2011). Morbidity indicators are high: 17% for acute malnutrition, 40% for vitamin A deficiency, 34% for anaemia, and 60% for parasitic infections (Béchir et al 2010; Zinsstag et al 2005). In 2000, complete vaccination was nil among children (Daoud et al 2000).

Ill-health among pastoralists is also due to the unsuitability of national health policies, with national intervention strategies focusing on the settled population. Other factors blocking access are of a socio-cultural and geographical nature, e.g. insecurity and low accessibility of natural resources (Fokou 2008; Wiese et al 2004).

However, adapted health services exist for mobile pastoralists in the Sahel. In 2000 joint human and animal vaccination campaigns were organised by the local health services and facilitated by the Institut Tropical Suisse–Centre de Support en Santé Internationale (ITS–CSSI), the Ministry of Health, and the Ministry of Livestock (Figure 9). This increased women and children's access to vaccination in Chari-Baguirmi, Chad (Schelling et al 2007). Concurrently with the joint vaccination campaigns a comprehensive assessment recognised the necessity of integrating information, education, and communication in order to ensure a good understanding of the intervention (ITS-CSSI/T 2000). The "Health of Nomads" programme demonstrated the possibility of providing health services in an integrated way within the "One Medicine" and "One Health" concepts.

Moreover, some schools were created in nomadic zones in 2005 because these communities seem to be have been forgotten in all planning of social services. The basic education project was implemented in collaboration with the Ministry of Education and UNICEF-Chad.



Figure 9: Joint human and animal vaccination campaign in mobile pastoralist communities in the Lake Chad area. (Photos by Mahamat Béchir, 2013)

Between 2009 and 2011 interventions were developed by CSSI on the Darfur border in the Sila region. The recipients were the displaced populations and the local livestockowning communities. This project focused on both human and animal health. The main result of this project was to achieve annual full vaccination coverage totalling 84% in children younger than 1 year and 48% in women among the displaced, transhumant, and local communities. In all, 59% of livestock were also vaccinated in that year. This holistic approach was highly appreciated by the target communities because it provided much needed animal and human health services. The activities and outcomes of these joint services were documented and published in scientific journals and the efficiency of the intervention was demonstrated and recognised by the involved ministries and communities.

The results of the local projects were promising. This inspired us to work towards a higher level. Our aim was that the government should take over the researchers' activities. Therefore, the main policy-influencing objective of the research was to engage the government to scale up and perpetuate social services in remote rural zones of the Sahel and particularly among mobile communities.

The specific objectives were:

- Creating governmental commitment to carry the programme at a national level;
- Advocacy and involving target communities, researchers, and technical partners and donors;
- Assuring a scientific and technical assessment of the policymaking process and providing research-based evidence.

4.2 Researchers' engagement with key stakeholders

The key stakeholders engaged in the process were the Centre de Support en Santé Internationale (CSSI), the Swiss Tropical and Public Health Institute (Swiss TPH), the target communities, and the Ministry of Planning and other ministries of the Chadian government. In the following we describe our activities and what ideal changes in practices we expected as a result of our engagement.

- **CSSI / Swiss TPH:** The CSSI and Swiss TPH were the Southern and Northern partners that jointly implemented the "Health of Nomads" research and intervention programme. Both institutions played a double role, acting as researchers and project managers at the same time. They were the main facilitator, offering catalysing activities between ministries as well as between ministries and pastoralist communities.
 - **Targeted communities:** The targeted communities were mainly mobile pastoralists: Fulani, Gouran, and Arabic communities living in remote zones with low access to social services. These communities often use traditional medicine and their morbidity and mortality rates are higher than in the general population. We proposed to improve the situation by offering formal medicine.

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The ideal behaviour change in the targeted communities would be that they would increasingly use existing modern medical services and new information technology, and according to the specifities of their health problems, that they achieve a better balance between the parallel services of traditional medicine and auto-medication. In this way, it seemed imperative to involve them in the whole process from problem identification to potential solution.

We recorded statements from within the communities and the local service providers, and brought the projects and stakeholders together during local and national workshops. In the workshops, the priorities of the communities were identified and decisions on next steps were taken. The nomadic communities brought up new ideas, e.g. the idea of a cross-sector policy document. They mentioned that resolving the health services problem alone was not sufficient. They suggested that their multiple preoccupations in term of security, resource accessibility, and social services should all be considered. Therefore, we discussed the outlines and drafts of the policy document that were later negotiated with governmental bodies. Results of the validation of decided approaches were presented in subsequent workshops – and corrective actions taken.

Ministry of Planning and other Chadian ministries: The Chadian government is the primary body responsible for provision of social services, including primary health care, to all Chadians and thus also to vulnerable communities such as mobile pastoralists. But it is the Ministry of Planning that plays the role of a coordinator when a development project involves more than two ministries. This ministry also represents the government vis-à-vis NGOs and development cooperation actors.

Our aim was that the Government appropriate our holistic and innovative approach through the Ministry of Planning (coordination of all involved Ministries), scale this approach up to other rural areas, and finally perpetuate this process for the well-being of pastoral communities. In the short term we expected

that a policy document would be endorsed by the Chadian government. Given their very long experience the CSSI and Swiss TPH would apply for the technical and scientific support and follow-up of its implementation.

In our programme we involved more than one Ministry. The main Ministries were the Ministry of Health and the Ministry of Livestock, with whom we organised joint human and animal vaccination campaigns. With the Ministry of Education we implemented nomadic schools. This was a holistic service package. Moreover, a cross-sector policy document on the integrated service package for mobile pastoralist and internally displaced people was compiled together with governmental and non-governmental partners and submitted to the government.

4.3 Outcomes: stakeholders' changing practices

The main stakeholders in this process were CSSI/Swiss TPH, the targeted communities, and the Ministry of Planning.

• **CSSI/Swiss TPH:** At the beginning our organisations played the role of catalysing synergies between the ministries of health and livestock for joint vaccination of animals and humans. We successfully demonstrated to the Chadian Government that the current district-based system and fixed health centres alone do not serve mobile pastoralist communities. In other words, we were able to transform ourselves from originally being researchers to becoming project managers and agents of change for the duration of this project.

However, moving between different roles turned out to be a challenging task. In the process we learned that policy negotiations are a tedious process and that processes require unremitting follow-up in the various ministries, since documents are not endorsed without this. Lobbying with ministries requires specific skills that we did not have at the beginning. Furthermore, we underestimated the time needed for this task. In future, we would not want to involve so many ministries and would start with smaller and step-wise policy recommendations.

Targeted communities: The nomadic health project worked with three nomadic communities: Fulani, Gouran, and Arab. Each community is organised in a different way and we had to adapt our approach accordingly.

The Fulani community is hierarchically structured and traditional chiefs are owed great respect. It was easier for us to convince their chiefs, who then convinced their communities. This approach functioned and work with the Fulani community was easy. Today, they agree to vaccinate both animals and humans, and they use modern medicine to treat themselves.

The Gouran and Arab communities are less structured and linked with their traditional chiefs. With these communities, it was not possible to approach the

chiefs and then let them convince the rest of the community. Theoretically, it would have been necessary to talk to every individual. Therefore, we used a different approach. We used mass-media communication tools such as local movies and posters to explain why vaccination campaigns are helpful for taking care of their health (Figure 10). This adaptation of communication helped to convince some communities, but behaviour change is a long process.



Figure 10: Sequence of symbolic representations (stages in the building of a tent) illustrating the importance of taking three doses of vaccines (poliomyelitis, whooping cough, tetanus, etc.) for complete coverage. (Drawings by Haroun, based on an idea from Mahamat Béchir and Hans Peter Bollinger)

• **Ministry of Planning and other Chadian Ministries:** Until now, the Ministry of Planning showed some interest in this programme. It played the role of coordinator. It convened with CSSI and other members of involved ministries for meetings and participated in writing the cross-sector policy document. It also participated in financing meetings and document writing. Once the document had been written, the Ministry of Planning sent it officially to all involved Ministries. Moreover, the Ministry of Education implemented a nomadic school together with UNICEF and CSSI. Since then, however, this dynamic engagement was stopped because of rapid changes of ministers in the Chadian government.

4.4 Plausible links between researchers' engagement and outcomes

There is a direct link between our engagement as researchers and the outcomes described above because we played various roles along the outcome chain. We acted as researchers, campaigners, project managers, and facilitators of policy processes.

One of the first preliminary results of our research showed that pastoral communities had better access to veterinarian services than human health services, with 0% of completely vaccinated children. This main information surprised and shocked donors and decision-makers. It was also the starting point for attracting attention to these communities and showed the degree of their vulnerability. It allowed us to raise money for implementing the nomadic health project. Lastly, we played the role of facilitator between ministries, for example between the health ministry and the livestock ministry to harmonise the schedule and programme of joint vaccination.

5 "Generate Light and Avoid Heat": Lessons Learnt from Research-Based Policy Dialogues and Advocacy for Sustainable Forest Governance in Northwest Pakistan

Babar Shahbaz, Talimand Khan

5.1 Context and policy objectives of the research

In the Khyber Pakhtunkhwa (KP) province of Pakistan, forest management and governance rules have changed substantially during the last decade due to a reform process. It was claimed by the government (and the donor agencies) that these forest reforms would establish inclusive or participatory forms of forest management in the province. However many studies, including those conducted by the NCCR North-South Pakistan Research Group, have indicated that the intended objectives of these so-called reforms were not achieved, resulting in widespread chaos among stakeholders (see for example Steimann 2003; Shahbaz 2009; Shahbaz et al 2011). Some of the main hindering factors indicated by this research were: mistrust and lack of communication and interaction between local communities and the state; diverging interests between the Forest Department who emphasises forest protection and the local communities who emphasise forest use (Figure 11); a gap between customary and formal rules, and resulting issues of unclear property and use rights (Geiser and Steimann 2004; Sultan-i-Rome 2005; Shahbaz 2009). Against this backdrop, the NCCR North-South Pakistan Research Group initiated a number of action-research projects to address some of the above-mentioned problems.



Figure 11: People living close to forests depend on forest resources for fuelwood, timber for domestic use, and grazing land for their livestock. (Photo by Babar Shabaz)

This paper presents lessons learnt from two action-research projects that aimed to initiate a process of "research-based advocacy" to influence policymakers. The main policy objectives of the projects were:

- To improve existing forest management practices in Pakistan through researchinformed dialogues;
- To raise awareness of the local stakeholders' (community's) concerns regarding forest governance issues and try to sensitise the policymakers;
- To break barriers to communication, and to build confidence and trust among stakeholders from the perspective of sustainable forest governance in Northwest Pakistan.

5.2 Researchers' engagement with key stakeholders

A broad range of stakeholders are interested in forest resources. Depending on land ownership titles, customary entitlements, income, gender, and religion, these stakeholders have little or no power to claim their rights. During the reform process, the state and international donors failed to consult these actors and take their needs into account. Research results showed that neutral venues and independent mediators were needed to mediate between diverging interests and to build trust.

Our approach was to provide a neutral platform to different stakeholders for dialoguing and other activities. The dialogue process was mediated by the researchers. Keeping in mind the complicated and contested nature of the issue, we adopted a gradual (bottom to top) dialogue strategy. The aim was to "generate light and avoid heat" to develop a conducive environment for policy-level dialogue among the stakeholders (Figure 12).



Figure 12: People Forest Assembly in Bahrin Swat (March 2011), attended by forest communities, NGOs, civil society representatives, local forest officials, and the Deputy Director General of forests of the then Federal Ministry of Environment. (Photo by Jamshid Ali Khan [SAFI])

Based on our previous research, we identified the following stakeholders for engagement:

- **Civil Society Organisations,** including Sarhad Awami Forestry Ittehad (SAFI) and village-level organisations: the locally based organisations are responsible for forest issues in the communities. SAFI for example mostly represents the forest users and their rights. Therefore, these organisations are key for inclusive policy dialogues on forest governance.
- **The media (journalists):** Electronic and print media are central for raising public awareness of the fact that Pakistan's forests are being rapidly depleted. Local people's needs in terms of forest resources are made public through newspapers and radio programmes. With the media, pressure can be raised on policymakers as well as on the administration reforming forest governance.
- **Members of the provincial parliament:** Forest is a provincial subject and only the provincial assembly or parliament can legislate on it. Parliamentarians are key to initiating a forest reform process that is more responsive to local needs. Local people, forest owners, and user communities need a better balance between customary and formal rules as well as between property and use rights.
- Officials of the provincial forest department: Research results showed that the good intentions of earlier forest reforms mainly failed at the level of the provincial forest department. Contrary to the principles of participatory forestry, the forest department only emphasises forest protection. If forest management practices are to be improved, the forest department is therefore one of the most important actors.

The dialogue process was started at the grassroots level, i.e. forest communities in the form of district level People Forest Assemblies. The focus at this stage was to contextualise the process in the local environment, theoretically as well as practically. The organisers introduced the process, underlined the importance of forests and of their sustainable management, and presented what issues and challenges of sustainable forest management they were facing. The mediators of the dialogues recorded their views in a systematic manner, prepared press statements for the newspapers, and further articulated the issues in the assemblies' reports.

The preliminary dialogues with the key stakeholders, particularly with the forest communities, and the output of these dialogues set the stage for the next step of multistakeholder dialogues with members of the parliament and administration in the form of roundtables and workshops. These events took place at the local, district, provincial, and national levels. Mostly, the topics and themes of the roundtables were based on the issues that came out of the grassroots-level dialogues; these were supported by the researchers' findings, who thus supported the process by providing expert knowledge. The stakeholders were given the opportunity to express their concerns, support their arguments rationally, and exchange ideas on how to improve forest practices. The results of the roundtable were published in the media as well as in scientific journals, for example in the Pakistan Forest Digests (SDPI 2011). Recommendations for forest reforms were made available through policy briefs (Shahbaz and Geiser 2012).

5.3 Outcomes: stakeholders' changing practices

The researchers' involvement with key stakeholders led to promising results. Important short- and medium-term steps were made that will pave the way for far-reaching steps towards improving forest practices. Most importantly, key stakeholders at the local level were encouraged to voice their concerns. Thanks to the scientific evidence that supported the communities' statements, local people were taken seriously by decision-makers at the provincial and national levels.

- At the local and district levels: New actors were mobilised as agents of change for forest issues. After participating in the roundtable held in Swat, the Rotary Club showed interest in taking forward the process in Swat and organised a joint workshop to raise community awareness. The event was given sufficient coverage in print and in the electronic media. The event further motivated the Pakistan Army (stationed in Swat) to start a community plantation campaign called: Sheen Swat Zama Watan (my mother land is green Swat), in collaboration with the Rotary club, the district government, and civil society.
- With regard to the media: Relevant journalists were sensitised through the researchers' communication campaigns. They now better understand the concerns of the local communities regarding the issue of sustainable forestry. Media events were organised for stakeholders, particularly for forest communities and farmers. The electronic and print media, especially the local print media, covered the events and published news stories about sustainable forest management and its importance in view of climate change.
- With regard to policymakers: Media coverage and participation of key stakeholders in roundtable workshops also showed effects. A member of parliament raised the concerns of local forest users in a parliamentary session. After attending the dialogue meeting, the honourable member submitted a call for a resolution to the provincial assembly after getting the consent of fellow members from the forested areas of the province. Members of the Provincial Assembly (MPA) convinced the provincial Chief Minister of considering local institutions in forest policy. And the provincial minister unequivocally declared during the provincial roundtable that instead of a traditional approach, sustainable forest management should be the policy guideline that needs collective efforts at the national level.
 - At the level of the forest department: Researchers observed increased interaction between civil society and the state officials. Members of the forest department were sensitised to local people's concerns through this interaction and seem now to be more open to cooperation with local-level actors.

In sum, the outcomes are mainly at the level of sensitisation. Researchers observed a raised level of public awareness of the problems related to forest management. A better understanding of the problem is an important precondition for any intention to act and change practices. Statements that expressed willingness to launch new forest reforms were also recorded. There is still a long way to go until reforms are made operational, but these first steps in the right direction are promising.

5.4 Plausible links between research engagement and outcomes

The input of experts and researchers in the policy-level dialogues further authenticated the process, particularly in the eyes of one primordial stakeholder. Provincial Forest Department and Ministry of Environment officials were convinced of the rationality of the community's point of view because it was supported by research results and expert views of sustainable forest management. This approach removed the apprehension of policymakers that common people often indulge in exaggerations that cannot be considered to be rational and cannot be taken as evidence for policy change. The relevant research findings worked to balance extreme positions and exaggerated claims made by some stakeholders.

Apart from the research engagement, there were other actors and factors that contributed to the outcomes. One aspect is the reputation of the organising institutions, SDPI and the NCCR North-South, and their expertise in networking and bringing together the stakeholders. Another factor was the timing. At the very beginning of the process Pakistan was hit by the 2010 floods, dramatically demonstrating the importance of forests managed sustainably. Some of the influential stakeholders such as the media and the government were therefore sensitised and as a result, they took the researchers' engagement seriously. Moreover, the campaigning at the grassroots level involving the forest owners and users in the forested areas, and the coverage of this campaign by the media created political pressure, particularly on parliamentarians. They were not only part of the process but took the claim for a sustainable use of forests forward to the government.

6

Looking Back: Plausible Links Between a Research Intervention and the Course of Development in the Tajik Pamirs

Thomas Breu, Claudia Michel, Alisher Shabdolov, Hans Hurni

6.1 Context and policy objectives of the research

Promoting sustainable development in the mountainous region of the Tajik Pamirs is socially, economically, and ecologically challenging. This region of Tajikistan was always considered of high geostrategic importance by the Soviet Union because it shares borders with China and the Indian subcontinent (i.e. with Pakistan and Afghanistan). The breakdown of the Soviet Union led to the disintegration of Central Asian states and vital subsidies that had become the backbone of mountain economies in these states were abruptly cut (Figure 13). In Tajikistan, the political transition after independence caused impoverishment, economic slowdown, and environmental degradation throughout the whole country and particularly in the Pamirs. A decline in living conditions and outmigration were the consequence. At the same time, refugee influx due to the civil war raging in other regions of Tajikistan aggravated the situation, bringing the region close to a humanitarian catastrophe. With the support of development assistance from the international community, the situation stabilised in the mid-1990s but remained critical, with continued dependence on foreign aid.

As one of Tajikistan's international cooperation partners since the 1990s, the Swiss Agency for Development and Cooperation (SDC) initiated the Pamir Strategy Project (PSP) as part of the International Year of Mountains in 2002. The PSP was a pilot project with a twofold aim: to improve living conditions in the Tajik Pamirs while also developing a new methodological approach to mountain development that could be applied in other areas as well. The Pamir Strategy Project consisted of a transdisciplinary research approach involving scientists from different disciplines, as well as local, regional, national, and international stakeholders. Academic and non-academic stakeholders collaboratively worked on defining a development strategy for the Tajik Pamir Mountains and finding solutions to the problems of transition.

The Centre for Development and Environment (CDE) implemented the project with support from SDC and in cooperation with agencies from the Aga Khan Development Foundation (AKDN), the Agency for Technical Cooperation and Development (ACTED), and local authorities. A Geographic Information System was established, combining data on the status and dynamics of various sectors with information from participatory studies at village level. Against the background of the information provided, a multilevel workshop in the Gorno Badakhshan Autonomous Oblast (GBAO) brought together 80 stakeholders from the local to the international levels to negotiate

a strategic vision for the region in October 2002. The active involvement and broad participation of numerous stakeholders helped to create a consensus on the priorities of the future agenda (Hurni et al 2004; Breu et al 2005).

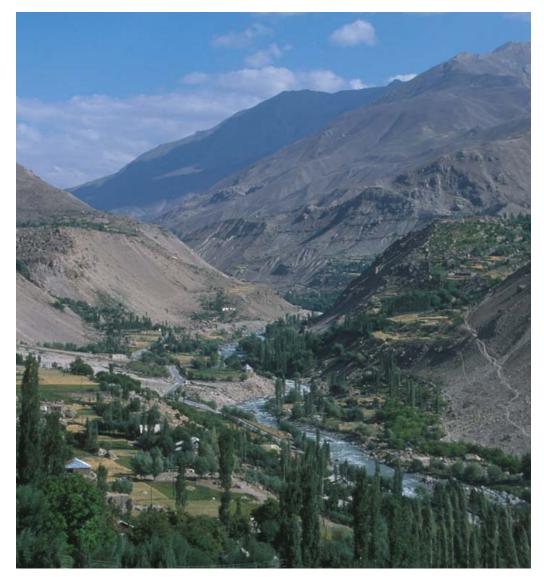


Figure 13: Tavdem, a typical village with 644 inhabitants in the remote area of the Tajik Pamirs. The transition of this high mountain area from a socialist planned economy system to a market economy still poses a great challenge today. (Photo by Chris Hergarten)

The present study explores the effects of the methodological approach on the actors involved in the PSP, slightly more than ten years after completion of the project. This looking back on the long-term outcomes of the research intervention is a selective view, with no claim to a comprehensive understanding of the various effects of the Pamir Strategy Project.⁵ The study tracks the outcomes of the following policy objective: participating actors – local communities, NGOs, and district-level and national-

⁵ Among the aspects that could be investigated in a more comprehensive inquiry on outcomes are how the PSP contributed concretely to sustainable mountain development and whether the methodological approach was transferred to other projects and programmes.

level government bodies – are expected to integrate the results of the workshop in their institutions and adopt the participatory stakeholder approach of the workshop. This objective may be of minor importance compared to the overall effects expected from the Pamir Strategy Project. But without these initial steps no progress is to be expected on any of the dimensions of sustainable development. Therefore, it is of primordial importance for the region concerned. Further, the chosen participatory approach was probably applied for the first time in a remote mountain region of the former Soviet Union states; therefore, assessing its outcomes is of general interest.

Having said this, we would also like to mention that the most important direct outcome of the Pamir Strategy Project – excluded from this study – was the initiating of a Global Environmental Facility (GEF) project known as Sustainable Land Management in the High Pamir and Pamir-Alai Mountains (PALM). As a transboundary initiative of the governments of Kyrgyzstan and Tajikistan, the PALM project goes beyond the Tajik borders in order to "address the interlinked problems of land degradation and poverty within one of Central Asia's crucial freshwater sources and biodiversity hotspots".⁶ The PALM project adopted the comprehensive approach to development that was at the core of the Pamir Strategy Project, namely to link the assessment of environmental and socio-economic problems by a broad range of disciplines, and to strengthen the region's capacity to address the problems by enhancing collaboration among different stakeholder levels.

6.2 Researchers' engagement with key stakeholders

As a truly transdisciplinary research process (Wiesmann et al 2008), the interaction between researchers and stakeholders took place in all phases of the project. In this paper we focus on the phase of collective interpretation of results and definition of priorities (for more details, see Breu and Hurni 2003).



Figure 14: Participants of the participatory multi-stakeholder workshop for Sustainable Development of the Tajik Pamirs, held in Khorog, October 2002. (Photo by Daniel Maselli)

⁶ See the PALM website: http://www.ehs.unu.edu/palm/; retrieved 27 March 2013

The Pamir Strategy Project organised a Workshop for Sustainable Development of the Tajik Pamirs, aiming to ensure a sound validation of the results and obtain a broad representation of actor groups. It was a four-day multilevel stakeholder workshop held in Khorog, in October 2002 (Figure 14). More than 80 participants were present, representing various stakeholder groups, ranging from communities to international organisations. The overall goal of the workshop was to define the elements of a strategy for sustainable development of the Tajik Pamirs and to provide a platform on which different stakeholders and different scientific disciplines could share knowledge about the status and dynamics of the region.

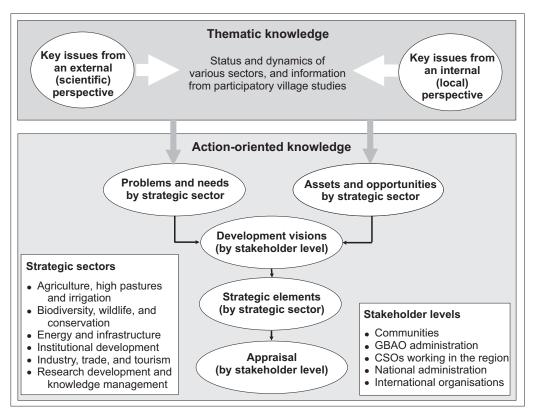


Figure 15: Process of the Pamir Strategy Workshop involving stakeholders from the local, district, national, and international levels, and addressing various sectors. (Source: Breu et al 2005, p. 141. Reproduced with kind permission of the publisher and authors)

The multi-stakeholder workshop consisted of five steps (see also Figure 15):

- 1. The workshop started with a presentation of the results of a number of studies providing information collected by researchers through village studies, statistics, maps, and literature reviews, prior to the workshop. The researchers distinguished between an 'external' view and an 'internal' one whenever their own values and perspectives differed from those they had found among local people.
- 2. As a second step, a list of strategic sectors was jointly established by all participants. The strategic sectors chosen were: agriculture, high pastures, and irrigation; biodiversity, wildlife, and conservation; energy and infrastructure; institutional development; industry, trade, and tourism; research development

and knowledge management. Problems and needs, as well as assets and opportunities for each sector were discussed in working groups that included representatives of all stakeholder levels (from the local to the international).

- **3.** New working groups were then established for each stakeholder level. These groups defined visions of sustainable development from their perspective.
- **4.** Then strategic elements were elaborated by sector. For each sector, two to three elements were defined. For example, for the energy and infrastructure sector these were: maintenance and upgrading of communication systems; improved energy capacity; and maintenance of public infrastructure and services.
- 5. Finally, the groups constituted according to stakeholder levels appraised the different elements of the strategy by sector and according to importance and urgency. The common draft strategic vision the final result of the workshop included the compilation of all the perspectives.

The feedback from the workshop participants was very positive: participants appreciated that the participatory approach treated representatives from different stakeholder levels and disciplines in an equal manner; they also found the clear structure of the approach useful for collectively defining priorities. Given the fact that both the ruling party and the former communist elite had almost absolute political power, such a participatory negotiation of a draft development strategy involving stakeholders from the local, province, national, international, and NGO levels was exceptional.

6.3 Outcomes: stakeholders' changing practices

The multi-level negotiation was seen as a starting point for an on-going process of participatory strategy development and implementation. The participants were expected to integrate the results of the workshop in their institutions and to use the participatory stakeholder approach in future. In order to track progress on this objective, followup interviews were conducted in 2012 for the present study with five of the 80 participants. The interviews partners were selected according to their stakeholder level and importance. The interview sample aimed to ensure feedback from each level of decision-making.

- At the NGO level: An interview took place with Butabekov Dilovar from the Aga Khan Development Foundation (AKDN). The AKDN is an important and well-off player operating in the area since 1993 with humanitarian programmes and development initiatives. The activities were carried out by the Mountain Societies Development Support Programme (MSDSP) founded by AKF. Although other interview partners attested an influence of the Pamir Strategy Project on AKF, this was hardly mentioned by Butabekov Dilovar during the talk.
- At the national level: Two interviews were carried out. The first interview partner was Ogonozar Aknazarov, head of the Pamir Biological Institute of the

Academy of Agricultural Science, and the second was Sanginboy Sanginov, former head of the Tajik Soil Institute of the Academy of Agricultural Science and currently with the Food and Agriculture Organisation (FAO) in Tajikistan. Both interviewees are Tajik scientists: Aknazarov works in the province and has an in-depth understanding of the provincial changes that occurred after the workshop, while Sanginov is working at the national level and has an outside perspective on development in the Pamirs.

Ogonozar Aknazarov remembered the workshop as interesting in terms of topics, procedures, and grouping of people. It was the first time he participated in a workshop with such an approach. From his point of view, an immediate outcome of the workshop was an improved level of information on development issues among the participants. It was a new topic ten years ago, he assured, and since then, many development initiatives have taken place in the area. In terms of concrete actions for meeting the strategic objective, important progress had been made in his view, but still did not meet what was originally envisioned. For example in the field of energy, issues had been mainly pursued in the Tajik area. The legal base was improving but not yet satisfactory. The huge potentials for tourism and geothermal energy could still be more exploited. New technologies had been introduced, such as species for cultivation that had a positive effect on potato production, for example. But people were also suffering from the lack of land and pasture degradation in the Eastern Pamirs had not been stopped. A positive outcome was a fruitful collaboration with the NGO Christensen Fund in the field of biodiversity. Ogonozar Aknazarov believed that thanks to the involvement of local stakeholders during the workshop, the results of the workshop in the province had been disseminated. He assumed that the provincial government took up results of the workshop as well. But he did not know of a direct reference to the Pamir Strategy Project, and many other important agencies were now present with development initiatives in the province. All in all, the PSP was a new tendency to include local knowledge and only few actors had worked with multi-level stakeholder workshops ten years ago. It became a common practice later, but this cannot be attributed only to the Pamir Strategy Project. For sure, however, the PSP was one of the early projects to use an approach that later was mainstreamed.

Sanginboy Sanginov also made positive statements about the outcomes of the Pamir Strategy Project. However, he distinguished between the strong influence the project had on NGOs, e.g. MSDSP, other donors, and external agencies in general, compared to the weaker influence on Tajikistan's government agencies. But he also saw a positive influence on the government side, in terms of uptake of the results as well as adoption of the participatory approach. For example he mentioned that parts of the Pamir Strategy document can be found on the official website of the Gorno Badakhshan Autonomous Oblast administration.⁷

• At the province and NGO levels: Boimamad Alibakhshov – at the time of the workshop member of the Gorno Badakhshan Autonomous Oblast Adminis-

⁷ www.gbao.tj; retrieved 2 May 2013

tration and head of the NGO 'Milal-Inter' - was another interesting interview partner. Boimamad Alibakhshov drew positive lessons from the workshop. He appreciated the stakeholder views that became visible through the participatory approach and it was important for him to meet influential people. He assumed that this was a totally new approach for most participants. The approach is still relevant for his work in his NGO 'Milal-Inter' and he also experienced replications of the approach, for example in the PALM GEF but also on other occasions. He observed different direct outcomes of the workshop. For instance he believed that the law on mountains as well as the GBAO development plan for 2015 were highly influenced by the strategy. In addition, he mentioned the establishment of the free economic zone in Ishkashim, which had been put forward as a strategic goal. He mentioned that the workshop proceedings were translated and distributed in the province, but the effects were unfortunately not known to him. He came across familiar formats for stakeholder involvement on various occasions since then, in regional workshops, e.g. on water, natural resources, and with international agencies such as SIDA, OSCE, and others. In this sense, the workshop was also useful to become acquainted with an approach that later became common practice within the international community in the Pamir area and elsewhere.

At the local level: An interview took place with a former Chairman of Roshtkala district Shodibek Kilichbekov as representative of this level. He mentioned the fact positively that his district was given a voice during the stakeholder workshop and was heard by representatives of the provincial level on this occasion. He was all the more disappointed that later no development initiatives were carried out in his village, for example by the PALM GEF. From his point of view, the workshop raised major expectations that were not fulfilled later.

In sum, all interview partners had vivid memories of the workshop. They remembered the activities and results of the workshop as well as the participants. This can be considered as an outcome as such because with a ten year time-lag the workshop took place a long time ago. The interviews provide a mixed picture of outcomes. Given the low number of interviews, no general conclusion is possible but the interviews provide interesting impressions on possible trends. For example, the fact that all interview partners were able to mention outcomes, that some outcomes were much more far reaching than others, and generally speaking that the influence of the strategy workshop seemed to be more lasting on expatriates and external agencies than on governmental units and communities.

6.4 Plausible links between researchers' engagement and outcomes

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Attributing outcomes to a research intervention over a long time period is full of analytical difficulties. The most important one is that over time, the influence of contextual factors on outcomes and impacts increases. In the case of this study, a very broad range of actors and factors are influencing the course of development of the Tajik Pamirs region and the Pamir Strategy Project is just one among many initiatives. This makes it difficult to attribute the influence of the PSP to the outcomes observed. The problem is known in evaluation literature as the "attribution gap" (Herweg and Steiner 2002). In general, but particularly in the case of this study, we expect instead to delineate plausible links between research and development rather than assume a causality from research activities to societal changes (Michel et al. 2010a; Michel et al. 2010b).

Indeed, several times the interview partners mentioned the problem of tracing the influence of the Pamir Strategy Project to current changes. All interview partners mentioned that many development agencies were now actively influencing the course of development in the Tajik Pamirs. An isolated view of the outcomes of the PSP was impossible. However, different interviewees very clearly saw that the basic orientation and many of the strategic objectives had been mainstreamed at the provincial government level, although the government authorities did not actually refer to the PSP strategy. By tracing discursive changes, e.g. the replication of the workshop proceedings or the original text of the strategic vision on websites and in organisations' planning documents, it was possible to assume a clear influence of the PSP. For example, Ogonozar Aknazarov and Boimamad Alibakshov mentioned that the results of the workshop in the province were translated and disseminated. This is an outcome that can be traced back to the workshop without any problem. The difficulty lies in appraising the meaning of a discursive change. A discursive change may be, but is not necessarily, a precondition for a more substantial attitudinal, procedural or behavioural change. Even if we distinguish between types of outcomes, it remains difficult to get a clear picture of the influence the PSP had on the actors involved.

Our way of addressing the problem of the attributional gap was to interview people who had been directly involved as participants and asking them questions about a very precise issue. We asked them to estimate the influence of the workshop on their own practices and on those of their partners. Therefore, we relied on their perceptions and their ability to plausibly link the outcome of a ten-year-old research intervention to daily practices in the Tajik Pamirs.

7 The Influence of ROMA on Rethinking Academic Research: An Experience from Migration Studies in Nepal

Anita Ghimire

This paper describes how the RAPID Outcome Mapping Approach (ROMA) influenced a group of researchers studying migration and development in Nepal. ROMA encouraged the group – in particular the author of the present study – to think differently about how we use research. Based on our experience of applying the approach, it also led us to think of using the approach from the outset of a research project. We realised that for academics – who are usually obliged to generate knowledge for publications, with a clear emphasis on publishing in peer-reviewed journals – ROMA helps to position one's research in relation to a theory of change and thus takes researchers a bit further than only to the stage of generating the scientific knowledge. Using ROMA at the beginning helps to consider the research as a product to be used by different kinds of customers; it also forces researchers to think about how to identify these customers and make plans to tailor products at the very outset of the research. The present paper is a personal reflection by one member of the group on how to combine a transdisciplinary research approach with the ROMA tools for maximizing impact.

7.1 Background

I was admitted as a PhD candidate within the NCCR North-South programme after having already been introduced to the transdisciplinary research approach from a rather theoretical perspective. My understanding of what transdisciplinarity meant was limited to this theoretical viewpoint: I understood that I had to analyse the perspectives of all kinds of stakeholders in order to make my qualitative research valid from a methodological view. I thought about how to do this but was not aware of a systematic tool for doing it. Therefore, in my PhD, I started to interact with stakeholders only when I started my fieldwork. This interaction served my purposes as a researcher seeking to gain knowledge about what they were doing. I was therefore focusing on interviewing them and reading their programmes, reports, and reflections whenever possible. It took time for me to understand that what I produced at the end of my PhD could be envisioned from the very beginning not just as an academic publication but also as a product to be used by these persons, and that with some early planning it could have been tailored to be used by different groups for whom the research findings were relevant. When I started my post-doc work, the NCCR North-South introduced us to the ROMA approach. In this workshop, I started reflecting on my PhD days when I had tried hard to make a plan regarding how to make my research transdisciplinary. I realised that part of it was related to engaging with (not just interviewing) stakeholders and that ROMA could have been an approach and a tool that would have been helpful to solve the dilemma I had. After getting to know the ROMA approach, I decided to try it out as a small part of my post-doc project on "Migration and Development: Use of Knowledge and Skills in the Migration Process".

The overall objective of the "Migration and Development" research was to critically examine the role of knowledge and skills in the migration process and to see how knowledge can be applied to create positive changes. The research aimed to critically examine the role of returnees' knowledge and skills in making positive changes. This research was carried out with a small team of researchers in Nepal, Pakistan, Kyrgyzstan, and Switzerland. One of the major questions for Nepal was to understand how to enhance the environment in such a way that students who returned from completing their education abroad ("returnee students") could use their knowledge and skills in Nepal after coming back to their home country.

Indeed, though there is no empirical evidence for this, there is a growing consensus that a noticeable number of student migrants have been returning or plan to return to Nepal at a certain point in time. As Nepal is recovering from war, these returnees could form an important human resource pool to revitalise the country. However, a vision of how best to use the knowledge and skills of these returnees is lacking. After two-and-a-half years of fieldwork, the research project in Nepal tried to devote a 3-month period to engaging with returnee students and using the ROMA approach developed by the RAPID team at ODI (Young 2005; Young and Mendizabal 2009) to do this.

7.2 The process of applying ROMA

Our first step in using the ROMA approach was to select a special group of returnee students from a larger sample with whom I had been in contact for case studies during my previous fieldwork. Based on the case studies, I first made a list of returnees who would be able to represent different fields. The returnee students selected for the process were those who had been working in Nepal for three years already prior to the interview. At the time of the interview, returnees were engaged in different kinds of work which involved the introduction of ideas that were relatively new in Nepal. The assumption was that among different kinds of returnees, these would be the group most likely to be able to contribute to understanding and devising ways of enhancing the use of knowledge and skills that they had gained from experience and study abroad, with a view to triggering positive changes in Nepal. The research project then engaged with the selected returnee students, using the ROMA concept to identify and work out a way to raise the issue of enhancing the environment for good use of knowledge and skills by returnees.

Setting a policy objective

Based on the analysis of qualitative data, a review of secondary policy and programme documents, and consultation with the selected returnee students regarding what was the most important factor that could help them use their knowledge and skills, a policy objective was set. The researcher identified that – apart from a few international donors – there was a general lack of acknowledgement that educated Nepali migrants were returning and that they saw Nepal as a place where there was a lot of potential to use their knowledge and skills. It came out of the discussion with returnees that a recommendation paper would be a good way to raise the subject among relevant stakeholders. This led to the following policy objective: to develop an output in the form of a policy recommendation paper that would include what other stakeholders, including the government, could do to help returnee students use their knowledge and skills, ultimately for the benefit of the country.

Mapping the context

The context was also mapped based on the previous fieldwork. An analysis of the data showed that a significant number of students were thinking of returning to Nepal and trying to use their experience, skills, and knowledge in starting new ventures in the country. And a higher number of students did actually return after completing their studies and gaining some experience abroad. However, when the Nepalese government and other relevant actors think of migration, they focus essentially on Nepalese labourers who go to Gulf countries and Malaysia for foreign employment, and do not take into account the group of people who go abroad for studying and return to their country after this short period. This is why most of the focus of policy and programmes devised by the government, donors, and other stakeholders is on providing safety and skills for potential labour migrants. The issue of student returnees has not yet attracted any attention in policy and programmes.

Identifying key stakeholders

After confirming the findings from the fieldwork regarding the context, three focus group discussions were conducted with the selected returnees to map out the key stakeholders. The returnees were asked to identify key stakeholders that they thought were important in helping them use their knowledge and skills. The selected returnees had studied different disciplines. At the end of each focus group discussion, we were able to make a list of stakeholders; it was quite similar to the one shown by the previous fieldwork. It was then possible to group the stakeholders into different levels; interestingly, the stakeholders identified were not only from within the country but also from outside. For example, the government of the host country and the educational institution to which the students had gone in order to acquire a higher degree were seen as very important in shaping the experience of student returnees. Similarly, banks and other financial institutions and diplomatic offices of the host country in Nepal were also identified as important stakeholders who could support the returnee students in their efforts to use their knowledge and skills back home.

The researcher then used the "alignment interest matrix" to help the returnees map out the position of the stakeholders.⁸ To this purpose, the participants were asked to identify how important the identified stakeholders were, who would be willing to support them, and whom they needed to convince.

Developing a theory of change

As a final step in each of the focus group discussions, the participants were assisted in developing a theory of change. The researcher mediated the discussion and helped the participants to identify how we could best engage as a group with the identified stake-holders so that they might consider changing their present ways of working to support the returnee students in using their knowledge and skills in Nepal. The aim was that this would be put in the recommendation paper and the paper would form a basis for the returnees in engaging with the concerned stakeholders in the short and longer term.

This is what the project has done so far. As a next step, the researcher will summarise the discussions and write a first draft of the policy recommendation paper. This will be sent for comments to the returnee students who participated in the three focus group discussions. Then the returnees and the researcher will form a group to engage with the different stakeholders. The recommendation paper will serve two purposes: it will help the returnee students to devise their own strategies for further engagement and it will also be disseminated to the identified stakeholders and discussed with them.

7.3 Reflections on using ROMA in a transdisciplinary research process

The following lessons were drawn by the researcher from applying the ROMA approach to the research project.

From digging for knowledge to co-production of knowledge

The overall experience gained from applying the ROMA approach taught me as a researcher that my earlier form of engagement with the topic was more like a quest for knowledge from those whom I was "researching upon", and that this process of knowledge seeking could be made a process of collaborative knowledge building by using the ROMA tools. Unlike in the earlier process, use of the ROMA tools led the researcher and the people who were taken as target groups to become involved in building the knowledge together. For the researcher, this gave the research more depth. For the returnee students, being involved in the research made them reflect on their own past and helped them to map out their ways for further and better use of their knowledge and skills in their current careers. A common expression at the end of developing a theory of change was often "Wow, you made me reflect on my own past and now I take lessons from these discussions to reflect on how I can go further".

⁸ For more information on the Alignment Interest Matrix see http://www.odi.org.uk/ publications/5288-stakeholder-engagement-stakeholder-analysis-aiim-alignment-interest-influencematrix-roma; retrieved 27 March 2013

From knowledge production to use of knowledge

Involved in what I believed to be a purely academic endeavour, in my PhD days I was quite sceptical about whether a researcher can go further than contributing to scientific knowledge production. However, from the experience of using ROMA, I am now convinced that when knowledge is co-produced, it is not only communicated but it also has a larger scope for being used in different forms. One of the most encouraging examples from this research experience was that, as soon as the selected student returnees who were from different professional backgrounds engaged together, a common platform for discussion emerged. One of the returnees said that a research project like this was an important stakeholder in itself for building a common platform. There was a consensus that this project really helped in bringing these returnee students – hitherto scattered in different professions – together and enabling them to establish a new platform from where they could push their common agenda forward. The realisation that there was a common agenda, this coming together of the returnees, and the group's intention to push the agenda among relevant stakeholders are further important uses of the knowledge that was produced from the research.

An alternative way for research to approach stakeholders in the field

Methodologically, the ROMA tools can also be used for making more productive engagements during long term fieldwork as in qualitative research. When used in approaching stakeholders for the first time during the fieldwork, it builds a foundation for collaboration and openness on part of the respondents during further engagements. Drawing from the experience of this project, I assume that the relationship between researcher and respondents can become much smoother and more productive when there is a clear objective that the researcher and the population will engage with, and when this leads to co-producing knowledge and using it for the benefit of those who are – conventionally speaking – those "researched upon".

Similarly, I found that respondents are always anxious about whether their answers are correct. At the end of an interview, respondents often ask "did I answer everything correctly?" In such cases it is difficult to explain convincingly that the answers they give are subjective and in most cases there is no set of "correct answers". The underlying theme of the ROMA tool is co-production of knowledge. As such it leads the researcher to clarify from the very beginning that by responding to the researcher's questions, respondents are working together with the researcher to build their individual experience into knowledge, rather than answering correctly or incorrectly. Communicating in this way through the tool helps the researcher address the respondents' anxiety from the beginning. Due to this there is greater confidence on the part of the respondents and they answer more openly and provide more details. This leads to more productive data collection. At the very beginning of the researched and how to go further together in the application of knowledge, the whole process of qualitative fieldwork becomes much easier and ultimately more productive.

However, our experience also showed that when there is a resource and time constraint, it becomes difficult for both the researcher and the interviewees to engage in an equal way with all important stakeholders. For example, in the present work, international

diplomatic offices that were based in Nepal were regarded as a key stakeholder who could influence how students who have returned could use their knowledge and skills. But there was very little access to these organisations. In such a case, an intermediate stakeholder who could take our policy message to those beyond our reach should be selected – and this requires more time and resources. In this specific case we opted for using the government offices as an intermediary for the purpose. Moreover, when the ROMA tool requires identifying and categorising respondents at the very beginning of the process, it can be slightly problematic if the researcher has no practical knowledge of the field context – for example when doing research in a new country. Again, this requires resources and adequate planning.

7.4 Conclusion

This paper reflects on the use of RAPID Outcome Mapping Approach in a qualitative research project which looked at the role of knowledge and skills in the migration process. The ROMA tool was used specifically to look at how returnee students could better use their knowledge and skills gained from their study abroad. The researcher found that the RAPID Outcome Mapping Approach gives researchers a very unique handle on their research process and project. For the overall project, the use of ROMA from the very beginning forces researchers to visualise the final outcome as a product and tailor it according to the needs of different groups who could potentially use it. By encouraging researchers to identify their own policy objectives and the main stakeholders potentially concerned at the very beginning, and to formulate strategies to engage with them fruitfully, the approach helps researchers manage a productive and collaborative relation with the respondent. This makes the qualitative research process more participatory; as a consequence, rather than digging for knowledge from the respondents, the researcher becomes involved with the respondents in a co-production of knowledge. This can bring into research the benefits of transdisciplinarity and increase the potential usability of the research for the respondents. In addition, those who are the "object" of research also benefit from the approach, as they become knowledge co-producers. The approach is however not as suitable in cases where a swift assessment of situations is required or when there are other constraints related to time and resources. As the approach requires that we identify all the stakeholders in advance, map them out, and keep regular contact with them, this requires a great deal of time and effort.

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Interest is growing in the impact that science can have on reducing poverty in the global South. If we understand impact as the "demonstrable contribution that excellent research makes to society and the economy", the concept encompasses a variety of contributions of research-related knowledge and skills that benefit people and the environment. One reason for the growing interest in impact in this context is research councils' increasing focus on documenting the social and environmental benefits of science, as indicated by the above quotation from the British research councils. Another reason is that research funding agencies from the private and public sectors are now more interested in social innovations for solving problems on the ground.

Research can indeed influence policymakers' views, policy development, funding patterns, and implementation or practice. This is promising for those who would like to improve – and prove – the influence research can have on policy and practice. It is also of importance for better understanding the intended and unintended effects of research. This report presents the NCCR North-South approach to increasing the impact of development-oriented research. It explains how we can maximise our impact and how we can assess whether our efforts have worked, based on six case studies from around the world. The report is of interest to all researchers who wish to respond to policy and practice from their point of view and who are keen on publicising their evidence. It is also relevant to those who teach how to maximise research impact.

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