Frank Haupt Ulrike Müller-Böker

### **Grounded Research and Practice**

PAMS—A Transdisciplinary Program Component of the NCCR North—South

What do the snow leopard in the Kangchenjunga Conservation Area in Nepal, flood water diversion on Mount Kenya, waste separation in Manantlán (Mexico), conflict transformation workshops in Sudan, Ethiopia and Egypt, law and policy analysis with vigilantes in the Tunari park in Bolivia, and a radio program for Nepali migrants have in common? They are all so-called Partnership Actions for Mitigating Syndromes of Global Change (PAMS)—projects in an innovative research approach developed by the Swiss National Centre of Competence in Research (NCCR) North—South. This approach merges scientific knowledge and local, tacit or "non-scientific" real-life knowledge in a genuine, grounded research experience.

# Core problems of global change in the highland-lowland context

Core problems of non-sustainable development in mountain and highland-lowland areas are largely related to human activities in these fragile ecosystems, and may be intensified by the indirect effects of human activities in surrounding lowland areas, as well as by overall global developments. In 2001, during the preparatory project that laid the groundwork for the NCCR North-South program, a broad range of representatives from research and development institutions met in 8 regional workshops worldwide to identify such core problems of non-sustainable development in specific contexts, and to set the NCCR research agenda accordingly. These experts identified the following core problems as being of greatest importance and urgency in the context of highland-lowland interactions and in the mountain and highland context: contradictory policies and weak formal institutions at different levels; governance failures; insufficient empowerment and decentralization; erosion of traditional and/or indigenous institutions; social, cultural and ethnic tensions and insecurity; poverty and livelihood insecurity; unfavorable dynamics and imbalances in socio-demographic structures; inequality of ownership and access to land and natural resources; lack of adequate infrastructure and management; and degradation of land, soil, vegetation cover, and natural habitats in general.

# The three-track concept: research, knowledge dialogue and social learning, and mitigation

Partnership Actions for Mitigating Syndromes of Global Change (PAMS) aim to

test and implement strategies for mitigating core problems identified during the preparatory phase, and to explore the emerging potentials of global change. The PAMS component is a practice-based, transdisciplinary feature of the NCCR North-South. The concept is based on the assumption that the merging of scientific and practical knowledge adds value to both research and development projects, and that (transdisciplinary) research has an impact on mitigation of unsustainable development if it triggers social learning processes that further contribute to more sustainable outcomes and development. PAMS activities are primarily "research cum action" projects, simultaneously advancing social empowerment, research, and concrete mitigation of core problems identified in regions where the NCCR North-South is active (see Box).

### PAMS projects in a nutshell

Since November 2002:

55 PAMS approved, of which:

12 were in highland-lowland contexts, and

25 have already been terminated.

Funds committed by the NCCR North–South to PAMS: CHF 1.59 million (US\$ 1.37 million) Total funds mobilized: CHF 2.68 million (US\$ 2.30 million)

The concept underlying the PAMS approach is based on the main goal of the NCCR North–South program: **mitigation** of core problems and strengthening potentials through **transdisciplinary** research and stimulation of **social learning** processes. The three-track PAMS approach illustrated in Figure 1 shows these goals

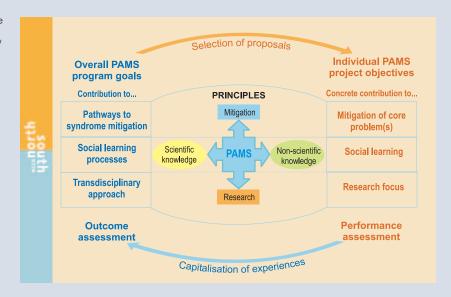
100

**FIGURE 1** The concept of the PAMS approach: sustainable development based on societal learning processes as an outcome of transdisciplinary action research. (Designed by Peter Messerli and Frank Haupt)

(left) and the objectives of individual PAMS projects (right). Researchers and local actors meet "on the ground," incorporating their diverse knowledge and experience, and entering into dialogue to develop new mitigation strategies and activities (center). Hence innovative ways of addressing problems and patterns of non-sustainable development can be worked out through social learning processes, with the participation of those concerned. Some activities emphasize research, others mitigation or knowledge dialogue. The challenge for the NCCR North-South is to capitalize on PAMS outcomes from different regions worldwide (Figure 2) and synthesize innovative and pioneering development strategies.

# Two years of PAMS implementation: lessons learned

An internal review has confirmed that practically all PAMS have a direct mitigation component and links to research, and that they generate lessons important in research. Accordingly, follow-up PAMS and takeovers of projects by new donors have been proposed, and PAMS outputs have also indicated new directions in research and given impetus to innovative research questions. Last but not least, the challenge now is to capitalize on this to better track and highlight the social and



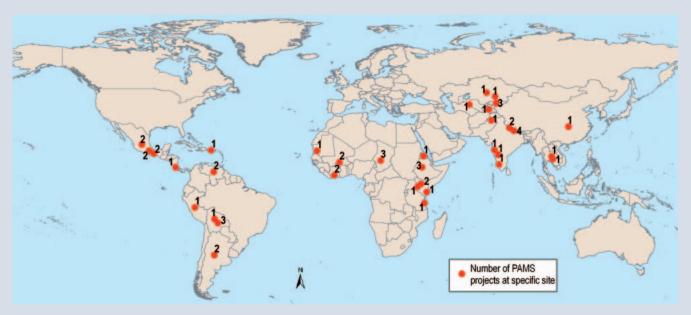
societal learning that has taken place among researchers, NGOs, and the groups involved, to determine whether sustainable development has been triggered.

Only a few PAMS projects have not produced the desired outcomes. Either the link to research and scientific backstopping was too weak or non-existent, or the concept of stakeholder participation, which is at the base of social learning, was not understood by the implementing organization. In some cases the NGO involved performed poorly or researchers had naïve and unrealistic expectations. However, the great majority of PAMS produced sound and exciting ideas and concrete effects.

# Contributions to institution building and social empowerment

Projects with Nepalese migrants (see the article by Thieme et al in this issue), for

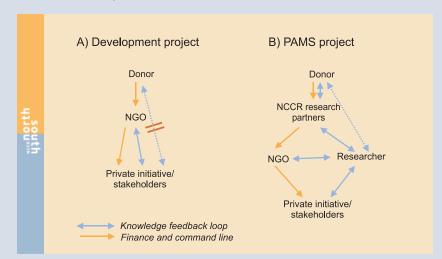
FIGURE 2 Location of completed and on-going PAMS (2002–2005). 55 PAMS have been approved to date, of which 12 are located in a mountain area or highland–lowland context. (Map by Kurt Gerber)



example, clearly show that capacity building in the institutions involved is realized where Northern researchers team up with Southern colleagues and organizations. Thanks to the expertise gained in the field, the South Asia Study Center (SASC)—the partner NGO in Delhi-is now executing a United Nations mandate on innovative partnerships for reducing the vulnerability of migrant workers to HIV/AIDS in India, Pakistan, Sri Lanka, Nepal and Bangladesh. The knowledge and the network generated, and the learning processes induced, can lay the groundwork for innovative mitigation strategies, influence government decisions, and contribute to societal empower-

Sometimes the involvement of a PhD or Master's candidate takes the form of a fellowship with the implementing NGO (see the article by Maselli et al in this issue). In this case the role of the student becomes that of an independent resource person and simultaneously a researcher and observer. This greatly enhances the quality of the work: sound research results and impulses for sustainable development. As opposed to what is usually the case with implementation of development projects, more emphasis is given to effectiveness than efficiency in project performance. Even so, effectiveness may come from "soft" learning processes rather than quantitatively verifiable "hard" facts.

FIGURE 3 PINGOGODON—the missing link to good "donorance" in development cooperation. (Based on Scheuermeier 2003)



### Improving the feedback loop

The above-mentioned association of an objective observer can be a way out of the power relations and information flow that constitute the "PINGOGODON" (private initiative–NGO–government organizations-donors) dilemma. The beneficiaries and subjects of development cooperation usually do not have a direct feedback link to donors; their needs and visions are typically "interpreted" through the bias of an NGO that considers itself a legitimate representative of beneficiaries or stakeholders. The implementing NGO, with a vital interest in producing visible success for its own and the donor agency's reputation, will report success stories. For example, the progress report will confirm that the 150 farmers targeted were trained and made aware of erosion control measures. The observer careful enough to look behind the scenes may be able to tell in addition whether the new methods are a suitable livelihood strategy, and whether or not they will be applied by farmers. This dilemma-and a way of resolving it through an observer less or differently biased—is illustrated in Figure 3.

### Mutual trust between researchers and local actors, and more credible research

PAMS allows science to come down from its ivory tower. The knowledge dialogue and the partnership approach stimulate an atmosphere of transparency and mutual trust, thus making research perceptible to a "non-scientific" audience. Research is thus exposed to a reality check, with the immediate benefit of feedback, while also running the risk of failing to perform.

With the PAMS approach, however, negative outcomes are also results. What matters is that we know why the project failed, and what lessons can be learned in both research and practice. This again has the potential to lead to a social learning process based on contributions from scientific and practical knowledge, and hence to empowerment.

• Influence at the policymaking level: Scientific reinforcement of local knowledge and subsequent documentation and publication, enhanced by a certain

prestige usually reserved for representatives of academia, have a great potential for further influence at the policymaking level.

- Incentives: PAMS resources can be judiciously invested as a welcome incentive to collaboration in research (or compensation for patiently playing the role of stakeholder in the presence of curious MSc and PhD candidates, senior researchers, experts, etc), thus creating an enabling environment for a fruitful culture of research that also enhances the intercultural competence of all partners and institutions involved. In many cases PAMS incentives have clearly eased researchers' access to people and information, and have been the first stage in a longer lasting relationship of mutual trust.
- Continuity: Because PAMS projects are small-scale and of short duration with limited funds, particular attention is given to the continuity of activities. Either these are unique, stand-alone actions not necessarily requiring follow-up (eg workshops, seminars, training courses), or they are suitable for incorporation into an on-going program or for a subsequent guarantee of funding (eg product development and promotion of biogas digesters in Kenya that will be marketable, income-generating products).
- Quality improvements: A combination of research and mitigation ensures better quality. This is achieved by research results grounded in reality and tested, based on sound knowledge of the local situation, thus allowing for application to other contexts as well. Local mitigation strategies are also improved by state-of-the-art theoretical knowledge

that has been shaped in dialogue between local actors as the owners of traditional wisdom and practical experience, and researchers.

### The challenges

With more than 50 PAMS being implemented or terminating, the challenge is to capitalize on this considerable experience and the diverse knowledge it has generated, to synthesize it, and to focus on identification of sound developmentoriented research and sustainable development. The research questions to which PAMS are expected to provide answers are: What is the added value of transdisciplinary research for syndrome mitigation compared to conventional (disciplinary) research? What societal learning processes have been initiated and why? What paths can be taken to mitigate a particular problem?

To this purpose, procedures for monitoring outcomes are currently being reviewed and optimized for application at project level (have the planned activities been carried out?), in terms of research (what were the direct benefits for the researcher? what lessons have been learned and integrated into research?) and at program level (can transdisciplinary research contribute to syndrome mitigation? have societal learning processes been initiated?). Looking back on 2 years of experience with PAMS, the (preliminary) conclusion is that this exciting component of the NCCR North-South has a spectacular potential to contribute to more effective, more accurate, and more relevant problem-oriented research by grounding it in practice.

### **AUTHORS**

### Frank Haupt

National Centre of Competence in Research (NCCR) North–South, Institute of Geography, University of Berne, Steigerhubelstrasse 3, 3008 Berne, Switzerland. frank.haupt@cde.unibe.ch

Frank Haupt has a diploma in rural engineering from the Swiss Federal Institute of Technology (SFIT) in Lausanne. He has extensive experience as a project planner and manager in developing countries, mainly in water and environmental sanitation. He is currently coordinator of the PAMS component of the NCCR North-South program.

### Ulrike Müller-Böker

Department of Geography, University of Zurich-Irchel, Winterthurerstrasse 190, 8057 Zurich, Switzerland. boeker@geo.unizh.ch

Ulrike Müller-Böker is Professor of Geography and Head of the Human Geography Division at the University of Zurich. Her areas of specialization are human and cultural geography (especially South Asia), development studies, high mountain research (Himalayas, Alps), natural resource management, nature conservation, institutions, rural livelihood strategies, and migration. She is a member of the Board of Directors of the NCCR North-South, the Swiss National UNESCO commission, and the Swiss IGU Committee.

#### **ACKNOWLEDGMENTS**

The authors acknowledge support from the Swiss National Centre of Competence in Research (NCCR) North–South: Research Partnerships for Mitigating Syndromes of Global Change, co-funded by the Swiss National Science Foundation (SNSF) and the Swiss Agency for Development and Cooperation (SDC).

### **FURTHER READING**

Project documents for PAMS can be downloaded from the section on "Partnership Actions" on the NCCR North–South web site: www.nccr-north-south.unibe.ch

Hurni H, Wiesmann U, Schertenleib R, editors. 2004. Research for Mitigating Syndromes of Global Change. A Transdisciplinary Appraisal of Selected Regions of the World to Prepare Development-Oriented Research Partnerships. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Berne, Volume 1. Berne: Geographica Bernensia. Hurni H, Kohler T, Wiesmann U. 2001. Syndrome mitigation research: A new approach for mountainous areas of developing and transition countries. Contribution to the Workshop on Mountain Area Research, Abisko, Sweden, 6-9 June 2001. http://www.nccr-northsouth.unibe.ch/publications/Infosystem/ On-line%20Dokumente/Upload/Abisko-Contribution-01-05-15.doc; accessed in February 2005

Maselli D, Lys JA, Schmid J. 2004. Improving Impacts of Research Partnerships. Berne: Geographica Bernensia. Scheuermeier U. 2003. Why is LBL interested in decentralization, democratization and vocational training? Swiss Center for Agricultural Extension (LBL), BeraterInnen News 1/2003:5–8. http://www.lbl.ch/internat/services/publ/bh/2003/01/about%20\_us.pdf; accessed in February 2005.