

grammes and funding initiatives take place independently on different levels. In view of funding initiatives for research cooperation with developing countries and emerging economies in sustainability research, I would like to endorse the routine involvement of *actors from other policy fields*, such as of BMU or BMZ, as well. Empirical data has shown that the lack of connection and cooperation of science policy funding initiatives with those of other policy fields, such as environmental and development policy, as well as the lack of involvement of partner countries, had negative consequences for the implementation of research projects as well as their effects (ch. 10).

In view of funding initiatives for research cooperation with developing countries and emerging economies, the BMBF's recent practice of designing *bilateral* (or multilateral) initiatives instead of unilateral initiatives, as still was the case in IWRM and Megacities funding, is a very positive development in view of a balanced, respectful cooperation with partner countries. This is a necessary turn away from a mode of agenda setting exclusively within Germany. Abandoning paternalistic patterns of cooperation means basing cooperation on jointly defined agendas and topics of interest. This *mutual ownership*, and not necessarily a financial contribution, should turn into the basis of *cooperation on eyelevel*. A cooperation on eyelevel with partner countries, to speak with the BMBF's terms, begins at the policy level, not at the project level. Joint policy making – starting with the joint definition of research topics for cooperation, is thus necessary.

Jointly pursuing a science for sustainable development in cooperation with others may trigger further *ethical* questions. If partners from developing countries and emerging economies are enabled to prioritize research problems independently of German priorities, the German side may have to learn to deal with diverging agendas, different pathways and solutions, and different problem framings. While allowing such a diversification would be desirable from a normative standpoint favouring global equality and post-colonial cooperation patterns, partners might attribute less importance to questions of sustainable development and prioritize other issues of cooperation. In view of reaching an overall goal of global sustainability, negotiating objectives and solutions and sensitizing all partners for global sustainable development may thus become necessary.

## 11.4 Further research questions

In empirically dealing with the research questions that guided the PhD thesis as a basis of this book, further research topics emerged, which could not be covered in its frame, but which pose interesting subjects of further research. Further research questions emerged in the following areas. *First*, further research should address the distribution of roles within research cooperation between Germans and inter-

national partners. Role distributions could be studied from a practical, management-oriented perspective: Which responsibilities, roles, functional distributions, practices, conditions etc. contribute to successful international transdisciplinary research?

From the perspective of SKAD, as well as from a psychological perspective, it would be interesting to scrutinize the roles in the consortia, as well: In how far are roles and responsibilities based on the subject positions offered through discourses on cooperation? How do hierarchies between partners and disciplines emerge, how do they manifest? How exactly is knowledge generated within projects? Does the distribution of roles affect the impact of projects? Comparative research on cooperation with industrialized countries might contribute interesting contrasts.

Additionally, research cooperation could also be addressed from a post-colonial standpoint. Understanding the roles and patterns of cooperation as well as analyzing scientific knowledge production would be worthwhile from a post-colonial perspective: How do pre-existing global power constellations influence knowledge generation, how can imbalances be overcome? How is the scientific corpus of knowledge created in developing countries and emerging economies integrated into the projects? Which non-Western concepts of sustainable development could serve as models for transformation? How can research cooperation further serve as a model of balanced cooperation in other fields of international cooperation?

A *second* interesting cluster of further research questions deals with the motivation of researchers applying for funding as well as of policy makers to follow or deviate from a specific discourse. How far does the individual researchers' preference influence the projects' scope? I have shown that the researchers' scope for agency is large, but there is still room for investigation on how preferences are shaped. Similarly, in how far are researchers able and willing to adjust to research topics that are set through the funding frame? Does the willingness to deal with an unpopular topic rise in times of increasing dependency of third-party funding? The perceived dependency and reluctance of criticism of research community and project management agencies towards the BMBF are striking. In this light, it would be worthwhile to further investigate which elements maintain the equilibrium of power and thereby stabilize discourse production. On a similar note, which social and psychological conditions have to apply to turn an individual actor within the BMBF into an agent of change, willing to contest a dominant discourse? How can niches of resistance be fostered?

A *third* complex of further questions emerges from the intersections of science policy with other policy fields. From a political economy perspective, it is highly astonishing that no analysis exists yet in view of the suitability of research funding as an instrument of technology export. Interviewees had different stances on the issue, but studies on the success of incorporating business partners into consortia

are still missing. No evaluations on financial returns or the success of research cooperation as door-opener for SMEs to foreign markets seem to exist yet.

In view of development policy, a recurring question arose in view of the interconnections of development cooperation and research cooperation. Where do development cooperation and research cooperation overlap, where are the boundaries between research cooperation and the subsequent implementation of results? How could both forms of cooperation ideally interact in practice, how could barriers among different policy fields be overcome to facilitate interaction? What could science policy learn from existing policy instruments of development cooperation to make sure that the impacts of projects do not vanish after cooperation ends? Questions of policy coherence, often posed in view of development oriented policies, should include science policy aimed at cooperation with developing countries and emerging economies, as well.