

# **Bridging the North-South Knowledge divide through transnational knowledge cooperation: Towards a research agenda**

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## **Abstract**

*This proposed research project locates itself in the science-policy interface in the area of development cooperation with the overall objective to support the realisation of the 2030 Agenda. In this setting, we aim to scientifically reflect on transnational knowledge networks and how transformative knowledge is created in such networks. We argue that decision makers, politicians, scholars and actors from civil society need more transformative knowledge created in transnational networks in order to achieve a transformation towards sustainability or pursue the implementation of the 2030 Agenda. Furthermore, we argue that transnational knowledge networks are a useful tool to decrease the North-South knowledge divide. We consider transformative knowledge as the result of a learning process which takes part in transnational knowledge networks. Our main research objective is to develop recommendations on how transnational knowledge networks can create effective knowledge which enables transformation towards sustainability. This outcome might be relevant for facilitators of transnational knowledge networks, participants or members of transnational knowledge networks and policymakers who set up, initiate and finance knowledge networks in order to receive advice for political decisions.*

## **1. Introduction**

To promote the goals of the 2030 Agenda means to aspire a transformation towards sustainability. We consider transformation along with M. Göpel (2016, p. 3),

*“as a qualitative degree of change that might happen in a system, and research seeks to describe typical patterns of such change processes so that they can be understood or at best guided. Sustainable development, on the other hand, is one possible quality of the outcome of a transformation process, and research supporting this normative goal seeks to identify and describe typical design principles that characterize sustainable systems”.*

In order to facilitate a transformation towards sustainability, scholars point at the necessity of knowledge that inspires and enables transformation in science, policy and civil society. This so-called *transformative knowledge* encompasses types of knowledge that may be characterized as „systemic, critical, generative and reflexive“ (DRIFT, 2019). We argue that transformative knowledge spans the three following dimensions: 1) *System knowledge* helps to understand and analyse a given problem, its genesis and the future development; 2) *target knowledge* is needed to develop a vision of what the future should be like and to determine desired goals; 3) *transformation knowledge* describes institutional, legal, technological, cultural

and other means to replace existing practices by new desired practices (Pohl & Hirsch Hadorn 2007, p. 36ff).

In this research proposal, we aim to analyse the production and circulation of transformative knowledge in transnational and transdisciplinary knowledge networks. We argue that knowledge produced within networks is more likely to be transformative if it is co-produced by all actors, as supported by transdisciplinarity scholars (Pohl & Hirsch Hadorn, 2008; Lang et al., 2012; Wiek et al., 2012; Jahn et al. 2012).

However, while sustainability-related knowledge production in international science cooperation is receiving increasing scientific attention (Schwachula, forthcoming), so far, there is little scientific engagement with the role of knowledge cooperation and the analysis of partnerships between South and North in *transdisciplinary actor networks*. With the proposed research, we aim to fill this gap.

We conceptualize transnational knowledge cooperation here as cooperation in networks which provide an enabling learning atmosphere to produce transformative knowledge. Peinhardt and Sandler (2015, p. XII) define transnational cooperation as “strategic interaction among countries and other key agents (for example multilateral institutions, multinational firms, nongovernmental organizations and public-private partnerships)”. Transnational knowledge networks also bring together these key actors across countries. According to our conceptualisation, *knowledge cooperation* occurs when different actors adjust and align their activities and behaviour in order to obtain benefits in form of increased knowledge. Knowledge cooperation is thereby a broad concept that may encompass the following, interlinked elements (for similar categories see Phelbs & Heidel, 2012, p. 1119; Creech & Williard, 2001, p. 6):

- *Knowledge sharing* in the sense of providing information, such as data and facts, as well as sharing norms and values as basis of sustainable development, and making these accessible to others,
- *Learning* as a constructive process of acquiring and reflecting and adjusting knowledge and skills, and
- *Knowledge (co-)production* as joint generation of new, shared knowledge.

We thus believe that in knowledge networks, different types of knowledge are disseminated, adopted, reflected and adapted by different members in different processes. Beyond the aspects of sharing, learning and co-producing knowledge, a further essential step of converting knowledge networks into actors of transformation is the process of *implementing* knowledge. In line with transdisciplinarity research, we put forward that engaging decision-makers and practitioners into networks is key to turning knowledge into action.

## 1.1 Research objectives

We argue that in order to achieve a transformation towards sustainability or pursue the implementation of the 2030 Agenda, societies - decision makers, politicians, scholars and civil society actors - may substantially benefit from the knowledge co-created and circulated in transnational, transdisciplinary networks. However, there are manifold challenges of working in transnational, transdisciplinary networks that can limit their potential impact. Using a social constructivist lens, we therefore seek to examine how transnational, transdisciplinary knowledge networks can overcome these challenges and create transformative knowledge to support the implementation of the 2030 Agenda.

Next to exploring the *generation* of sustainability-relevant transformative knowledge as described above, we aim to analyse the *mode* of knowledge co-production and partnership in networks. We argue that in an ideal case, transnational and transdisciplinary networks may contribute to decreasing the North-South knowledge divide. Knowledge circulation and co-creation may thereby turn into a means of achieving global epistemic equality (Shamsavari,

2007; Smith, 2009; Santos, 2014). We thus put forward that through transdisciplinary knowledge co-production, through knowledge circulation and through equal participation and integration of diverse perspectives, traditional biases as well as knowledge gaps between the North and the South might decrease on the long run.

## 1.2 Research questions

We argue that transdisciplinary and transnational knowledge networks have the potential to produce transformative knowledge which may bridge North-South inequalities on the one hand, while contributing to the implementation of the 2030 Agenda on the other.

In the proposed research project, we seek to assess how transnational knowledge networks produce transformative knowledge in order to achieve transformations towards sustainability. To do so, we will use the Managing Global Governance (MGG) Network as a case study, asking the following research questions in view of knowledge cooperation and partnership:

- What is transformative knowledge? Which types of knowledge emerge from the MGG Network, and how is it produced? How does knowledge become transformative?
- Next to different types of knowledge, which other tacit and explicit elements of cooperation make transformations more likely? Which role do norms, values, emotions, sense of belonging, or we-identity play?
- What are conditions, challenges and success factors for transnational networks in producing transformative knowledge in order to promote the implementation of the 2030 Agenda?
- Which concepts of partnership enable transnational, transdisciplinary network to co-produce transformative knowledge?
- How does knowledge cooperation in transnational and transdisciplinary knowledge networks contribute to bridging global inequalities, such as knowledge divides?

## 2. Analytical background

In this section, we aim to outline the theoretical and analytical approaches that inform our assumptions about the role of knowledge for sustainable development, about transnational and transdisciplinary cooperation in networks as well as about global knowledge divides and the role that cooperation may play in overcoming these. These preliminary assumptions will function as entry points into our explorative research, but will be modified based on empirical findings (see section on methodology).

### 2.1 Setting the scene: Partnerships for sustainable development

The Sustainable Development Goal (SDG) 17 points at the crucial role of partnerships to achieve the implementation of the 2030 Agenda. The United Nations (UN) define partnerships as “voluntary and collaborative relationships between various parties, both public and non-public, in which all participants agree to work together to achieve a common purpose or undertake a specific task and, as mutually agreed, to share risks and responsibilities, resources and benefits” (UNDESA, 2015, p. 13). Collaboration between national governments, civil society, academia, the economic sector and others is necessary because global challenges are increasingly interconnected and require solutions developed and legitimated by multiple actors. Collaboration in partnerships is regarded as an important tool to share knowledge, expertise, technologies and financial resources with the aim to support transitions towards sustainability (UNDESA, 2015, p. 3). Working in networks is one way to create partnerships and a special form of multi-actor collaboration. We regard transnational knowledge networks as an instrument to enable, maintain and foster partnerships between the

Global North and the Global South. In our research design we focus on partnerships in transnational and transdisciplinary knowledge networks. To gain a clearer picture on which approach to knowledge this research design follows, the next section will elaborate this in more detail. Knowledge created in partnership, integrating different global perspectives, is believed to be crucial to achieve a transformation towards sustainability (Müller, 2017, p. 13).

## **2.2 Enabling transformation through transnational and transdisciplinary knowledge networks**

A constructivist approach to knowledge underlies this research proposal. We conceptualize knowledge as product of social construction. No type or body of knowledge – neither lay expertise nor scientific research results – is impartial, objective or neutral. All types of knowledge emerge in social processes, and are thus coined by different social norms as well subjective values, shaped by different interests, world views, and perceptions of reality. Types of knowledge production that include different stakeholders with different types of knowledge, such as transdisciplinarity, are a logical consequence of depriving scientific knowledge of its unique position as the most objective kind of knowledge (Jasanoff 2003; Irwin 2008; Sismondo 2008, (Weingart and Lentsch 2007).

On this background we argue that transnational and transdisciplinary networks may lead to the creation of transformative knowledge, if the conditions for knowledge co-production are set right. As a mode of cooperation, the concept of transdisciplinarity seems to be most adequate to ensure a co-production of knowledge among diverse partners on equal footing: Transdisciplinarity entails the idea of respecting and appreciating diverse knowledges. Symmetric partnerships between Northern and Southern participants are strived for (among others: KFPE, 1998; Bradley, 2007; Stöckli et al., 2012; Wiesmann, Hurni, Ott, & Zingerli, 2011; Zingerli, 2010). Furthermore, transdisciplinary approaches are problem-, policy-, and/or impact-oriented. In all stages of the research process, partners from academia, civil society and policy are involved. Within the process of knowledge production, different types of knowledge coexist (Lang et al., 2012; Lyall, 2008; Mollinga, 2008; Pohl & Hirsch Hadorn, 2008).

We therefore assume transdisciplinary set ups to be conducive to the generation of transformative knowledge, in its “systemic, critical, generative and reflexive“ dimension (DRIFT, 2019). Systemic in this case implies that transformative knowledge treats systems as a whole. Transformative knowledge criticises the status quo and generates possible sustainable future scenarios and related actions. Reflexivity is a crucial feature of transformative knowledge in order to take the broader context as well power symmetries into account. Transformative knowledge is reflexive because it also considers our own position as well as the role of other actors within the knowledge creating process (DRIFT, 2019). The Dutch Research Institute for Transformation (DRIFT) also highlights that transformative knowledge is as result of a learning process. Supporting the learning process, providing spaces for co-creation and setting up an enabling learning atmosphere are crucial to increase the potential to produce transformative knowledge (Reiber, forthcoming).

## **3. Challenges of transnational and transdisciplinary knowledge production networks**

The following sections describe the challenges of transnational and transdisciplinary knowledge networks.

### **3.1 Power shapes transnational knowledge production: North-South knowledge divides**

Although collective action in form of transnational knowledge cooperation is a way to achieve solutions that are impossible to reach by one actor alone (Peinhardt & Sandler, 2015), this form of cooperation also is not free of challenges. North-South knowledge divides can be considered as one of the challenges.

In research so far a strong focus has been put on the „knowledge gaps“ between the South and the North (Evers & Gerke, 2004; Melber, 2015). The idea of knowledge gaps however implies that knowledge produced by the North is much more relevant than knowledge produced by the South. Indeed, academia privileges knowledge from the North over knowledge from the South (Santos, 2014). In the area of development cooperation, when Northern paradigms are used to solve Southern problems, this is equally problematic. Although ‘participation’ and ‘ownership’ have been internationally accepted norms for partnerships within development cooperation and development policy (see: OECD, 2008), knowledge-related activities such as technology transfer and capacity development are essentially activities that aim at knowledge flows from knowledgeable, i.e. Northern partners, to those partners in the South who need to ‘catch up’ knowledge-wise, thus following a Western / Northern model of development and modernity (Shamsavari, 2007; Smith, 2009).

Shifting global power constellations as well as the need to reassess sustainable development as a global endeavour underline the importance of opening up towards modes of cooperation that enable a co-production of knowledge. To overcome traditional biases between the North and the South in terms of knowledge, alternative methods of creating knowledge are needed. Transnational knowledge cooperation could be one possible pathway to achieve a more equal knowledge production which ensures the emergence of relevant and legitimate knowledge for sustainable development in both the global North as well as the global South.

### **3.2 Challenges of transdisciplinarity**

Three main aspects characterise transdisciplinary knowledge cooperation: 1) It is action-oriented and focusses on real-world problems; 2) It involves academic as well as non-academic actors, thereby bridging the boundaries between science and society and acknowledging knowledge beyond academic knowledge (e.g. practical knowledge, local knowledge, traditional knowledge); 3) it is participatory, explorative and open to a variety of methods.

Many scholars working in the field of transformation studies and sustainable development support transdisciplinary approaches because they transcend silo-thinking and yield at implementable solutions for real-world challenges. In this perspective, complex and contested challenges cannot be addressed successfully by single disciplines or academic knowledge alone (Siebenhüner 2018: 117; Schneidewind et al., 2016, p.4; Stehr, 2018, p. 314; Agrarwal, 1995; Antweiler, 1998; Nyong, Adesina & Elasha 2007; Sillitoe 2007).

The integration of a multitude of actors and their different bodies and types of knowledge, as well as their diverging mindsets, values, norms, interests as well as terminology and language is however challenging. Transdisciplinary work demands from participants an open mindset, reflexivity and the willingness to question taken for granted assumptions. It also requires the capability to deal with uncertainty and to explore non-defined and new approaches for knowledge production and problem-solving. Different actors will need to learn to understand each other’s language, working methods and perspectives. And as in other types of

transnational North-South cooperation, such as development cooperation, power structures can result in counterproductive dynamics. A literature review on conflicts in transdisciplinary research identifies four main challenges of transdisciplinarity (Siebenhüner 2018, p. 120ff): 1) *Differing values* can result in different understandings about problem framing, problem analysis and prioritizing solutions; 2) *Conflicting (economic) interests* can impede the definition of a joint purpose. Dominant interests can also result in an exclusion of certain problem solving options; 3) *Dissimilar claims of legitimacy* occur when the knowledge generation and learning process is regarded as biased, side-lining specific actors or failing to integrate some bodies of knowledge; 4) *Diverse knowledge claims* follow from differences in epistemic understandings and diverging claims of truth.

### **3.3 Challenges of cooperating within transformative knowledge networks**

The rationale behind knowledge networks is the assumption that knowledge sharing, joint knowledge production and combined strategies of knowledge dissemination make each network member stronger and more impactful than it would be alone (Creech & Williard 2001, p. 2). The reality of cooperating within transformative knowledge networks however is demanding for several reasons. For network members, network activities will often be extra work and will therefore not be amongst their top priorities. The bigger the size and geographical stretch of a network, the more difficult it is to create a sense of familiarity and build trust amongst the members. Without regular attention, inputs and activities, the involvement of members declines and there is a risk of the network falling apart. Furthermore, the network activities have to be evaluated and orchestrated in order to avoid fragmentation or duplication (Teller & Longmuß, 2007).

In order to live up to expectations of transformation, knowledge networks therefore need a clear purpose. If the benefits for the members are not clear, they will not be motivated to participate actively in the network. And without clear purpose and objectives, targeted activities to create impact cannot be developed.

Knowledge networks also need a membership base that is relevant. Members of the network should have a shared commitment for the objectives and be able to provide relevant contributions to the area of work based on their expertise and reputation (GIZ, 2015, p. 41). In a similar way, the involvement of relevant external stakeholders is important to increase the network's impact.

To a very large extent, the quality of a network depends on its leadership. Trust, transparency and good management are regarded as preconditions for successful work (GIZ, 2015, p. 57ff.)

## **4. Research design and methodology**

In order to fill the current knowledge gap about knowledge production in transnational transdisciplinary networks, we choose a qualitative, explorative research approach to understand transnational knowledge networks from the perspective of actors within the network, informed by our constructivist understanding of social reality. We will make use of qualitative social research methods and rely on a case study design for generating empirical data. In an interpretative approach, the research topic will be addressed by collecting data which reveals the emic perceptions of the interviewees and participants (Krumm, 2009).

Using the Managing Global Governance (MGG) Network hosted by the Deutsches Institut für Entwicklungspolitik / German Development Institute (DIE) as a case study, we aim to gain empirical insights on the proposed questions. The MGG Network provides a platform for

training, knowledge cooperation and policy dialogue. It brings together actors of governmental and non-governmental organisations from rising powers and Germany with the objective to contribute to the implementation of the 2030 Agenda through creating knowledge and partnerships at eye level. The MGG Network thereby also aims to transform international processes, such as global governance, by bridging the gaps between industrialised countries and rising powers. The network provides spaces that allow mutual learning and equal partnerships to grow. It fosters inclusive stakeholder dialogues among scholars, industry, politics and civil society. A core assumption of the MGG Network is that functional global collective action, such as global governance for sustainability, is possible if it is knowledge-based, trustful, fair, mutually benefitting and emerges from dialogue.

To analyse the research questions in view of knowledge production and partnership in the MGG Network, we aim to collect data from multiple sources, such as in qualitative, semi-structured interviews, participant observation of network meetings and conferences, focus group interviews as well as through the analysis of documents. We thereby wish to generate qualitative data on emic perceptions, including tacit knowledge and beliefs (Neuman, 2006). By using several methods of data collection, we aim to produce rich qualitative data, provide internal validity and add legitimacy to generalizing the research results. The data obtained will be examined in view of accuracy, authenticity, trustworthiness, plausibility as well as consistency (Neuman, 2006). In addition to allowing to check for these criteria of qualitative validity and reliability, this inter- and between method triangulation also generates additional data which gives additional depth to the study and will allow to search for additional explanations (Jick, 1979). It will thus allow detecting differing perceptions on transformative knowledge generation in networks across the MGG network participants and enable us to find common explanations.

The research is laid out in an inductive design, following an approach inspired by Grounded Theory (Corbin & Strauss, 1990). It follows that our current conceptual understandings of transformative knowledge production have to be continuously reassessed in view of their relevance and validity towards the subject of research, while empirical data is generated. In the process, our preliminary theoretical assumptions will be adjusted and sharpened in order to explain the findings adequately. After the phase of data collection, data analysis will be carried out using ATLAS.TI, while at the same time we will set the findings into the frame of broader academic literature and theories (Eisenhardt, 1989; Mikkelsen, 2005).

In order to carry out the proposed research project, the cooperation with the participants of the MGG network is essential. In order to “walk the talk” of knowledge co-creation, we aim to include partners of the MGG-Network in the research project as equal partners. MGG participants will be approached and asked for cooperation as partners in research, the research questions will be discussed and modified according to the diverse interests. In view of participant observation of events, as well as interviews, the coordinators of different thematic strands of the network – as gatekeepers – will be asked for consent and to host us. Within the proposed research project, the objectives of participant observation will be entirely disclosed to gatekeepers and other participants, who will thus be aware of the research process (Neuman, 2006).

This is especially important as the topic of research involves financial dependencies of the network participants from DIE funds in view of network activities. It is thus essential to ensure anonymity of the participants if they prefer not to be recognized. This might require some efforts in disguising case studies and interviewees in the later writing process. In addition, our own position within the network requires special attention to questions of positionality and reflexivity of research (Yanow, 2006). Our position within the network demands for reflection on two levels: first, as facilitator of the network, and second, as an actor from the North. We aim to make our interests, point of view and position in the network as well as in society transparent in order to make the interpretation and the reconstruction process more understandable, and thus more objective (Rothfuß & Dörfler, 2013, p. 25). As a scientist from the North doing research with or about the Global South, we are always part of a ‘dominant culture of rulers’,

even if we actively try to obtain oppressive structures (Rothfuß, 2009, p. 178). In order to overcome this dilemma, we try to make our positionality transparent as much as possible, treat the researched subjects, as well as our partners and their social reality with respect, reflecting on challenges and principles of cooperation and interaction as part of the research process.

The research project will follow the overall principle of ethics in research – to maintain the integrity of informants and do no harm (Cresswell, 1998).

## Bibliography

- Agrawal, A. 1995. Dismantling the divide between indigenous and scientific knowledge. *Development and Change*, 26(3), 413-439.
- Antweiler, C. 1998. Local knowledge and local knowing. An anthropological analysis of contested" cultural products' in the context of development. *Anthropos*, 469-494.
- BMZ - Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung. 2017. 'Role of Higher Education, Science and New Alliances – 2030 Agenda. Conference Documentation, Berlin, March 20-21, 2017'. Berlin/Bonn: BMZ.
- Bradley, M. 2007. *North-South Research Partnerships: Challenges, Responses and Trends*. International Development Research Centre (IDRC) Canadian Partnerships Working Paper 1. Ottawa: IDRC.
- Corbin, J. & A. Strauss. 1990. 'Grounded Theory Research: Procedures, Canons, and Evaluative Criteria'. *Qualitative Sociology* 13 (1) (March 1): 3–21.
- Creech, H., & T. Willard. 2001. *Strategic intentions: Managing knowledge networks for sustainable development*. Winnipeg: International Institute for Sustainable Development.
- Cresswell, J. 1998. *Qualitative Inquiry and Research Design. Choosing among Five Traditions*. Thousand Oaks, London, New Delhi: Sage.
- DRIFT – Dutch Research Institute For Transitions. 2019. 'Transformative Knowledge'. *DRIFT*. Retrieved from: <https://drift.eur.nl/topics/transformative-knowledge/>.
- Eisenhardt, K. 1989. 'Building Theories from Case Study Research'. *The Academy of Management Review* 14 (4): 532–550.
- Evers, H.-D., & S. Gerke. 2004. Closing the Digital Divide: Southeast Asia's Path towards a Knowledge Society. *Working Papers in Contemporary Asian Studies*, 5, 1-27.
- GIZ - Gesellschaft für Internationale Zusammenarbeit. 2015. *Work the net. A management guide for existing and emerging formal networks*. Bonn: GIZ.
- Göpel, M. 2016. *The Great Mindshift: How a New Economic Paradigm and Sustainability Transformations go Hand in Hand*: Springer International Publishing
- Grin, J., J. Rotmans, & J. Schot. 2010. *Transitions to Sustainable Development: New Directions in the Study of Long Term Transformative Change*: Taylor & Francis.
- Hirsch Hadorn, G., D. Bradley, C. Pohl, S. Rist & U. Wiesmann. 2006. 'Implications of Transdisciplinarity for Sustainability Research'. *Ecological Economics* 60 (1) (November 1): 119–128.
- Hornidge, A.-K. 2012. "Knowledge' in Development Discourse: A Critical Review'. In *Environmental Uncertainty and Local Knowledge Southeast Asia as a Laboratory of Global Ecological Change*, edited by Anna-Katharina Hornidge and Christoph Antweiler, 21–54. Bielefeld: Transcript.

- Hornidge, A.-K. 2013. "Knowledge", "Knowledge Society" & "Knowledge for Development". Studying Discourses of Knowledge in an International Context'. In *Methodologie und Praxis der Wissenssoziologischen Diskursanalyse, Band 1: Interdisziplinäre Perspektiven*, edited by Reiner Keller and Inga Truschkat, 397–424. Wiesbaden: Springer VS Verlag.
- Jahn, T., M. Bergmann, & F. Keil. 2012. 'Transdisciplinarity: Between Mainstreaming and Marginalization'. *Ecological Economics* 79 (July): 1–10.
- Jick, T. 1979. 'Mixing Qualitative and Quantitative Methods: Triangulation in Action'. *Administrative Science Quarterly* 24 (4): 602–611.
- KFPE - Kommission für Forschungspartnerschaften mit Entwicklungsländern. 1998. *Guidelines for Research in Partnership with Developing Countries. 11 Principles*. Bern: Kommission für Forschungspartnerschaften mit Entwicklungsländern.
- Krumm, T. 2009. 'Grundlagen der qualitativen Datenanalyse'. In *Methoden der Politikwissenschaft*, edited by Bettina Westle, 297–323. Baden-Baden: Nomos.
- Lang, D. J., A. Wiek, M. Bergmann, M. Stauffacher, P. Martens, P. Moll, M. Swilling, & C. J. Thomas. 2012. 'Transdisciplinary Research in Sustainability Science: Practice, Principles, and Challenges'. *Sustainability Science* 7 (1) (February 1): 25–43.
- Melber, H. 2015. Knowledge is Power and Power Affects Knowledge: Challenges for Research Collaboration in and with Africa. *Africa Development, XL(4)*, 21-42.
- Mikkelsen, B. 2005. *Methods for Development Work and Research: A New Guide for Practitioners*. 2. ed. New Delhi, Thousand Oaks, London: Sage Publications.
- Müller, C. A. M. U. 2017. *Towards Horizontal Cooperation and Multi-Partner Collaboration: Knowledge Sharing and Development Cooperation in Latin America and the Caribbean*. Baden-Baden: Nomos.
- Nilsson, M. 2016. How science should feed into 2030 Agenda. Retrieved from <https://www.scidev.net/global/sdgs/opinion/science-sdg-2030-agenda-sustainability.html>
- Nyong, A., Adesina, F., & Elasha, B. O. 2007. The value of indigenous knowledge in climate change mitigation and adaptation strategies in the African Sahel. *Mitigation and Adaptation strategies for global Change, 12(5)*, 787-797.
- OECD – Organisation for Economic Co-operation and Development. 2008. 'The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action'. Retrieved from: <http://www.oecd.org/dac/effectiveness/parisdeclarationandaccraagendaforaction.htm>.
- Peinhardt, C., & T. Sandler. 2015. *Transnational Cooperation. An Issue-Based Approach*. New York: Oxford University Press.
- Phelps, Corey C., R. Heidl & A. Wadhwa. 2012. Knowledge, Networks, and Knowledge Networks: A Review and Research Agenda. *Journal of Management* 38(4), 1115–1166. <https://doi.org/10.1177/0149206311432640>
- Pohl, Christian & G. Hirsch Hadorn. 2007. *Principles of Transdisciplinary Research*. München: Oekom Verlag.
- Pohl, Christian & G. Hirsch Hadorn. 2008. 'Methodological Challenges of Transdisciplinary Research'. *Natures Sciences Sociétés* 16 (2) (September 16): 111–121.
- Reiber, T. 2019. "Training civil servants for the implementation of the 2030 agenda: How to design and implement transformative capacity development formats". Unpublished document.

- Rothfuß, E. 2009. Intersubjectivity, Intercultural Hermeneutics and the Recognition of the Other—Theoretical Reflections on the Understanding of Alienes in Human Geography Research. *Erdkunde*, 173-188.
- Rothfuß, E., & T. Dörfler. 2013. Prolog – Raumbezogene Qualitative Sozialforschung. Konzeptionelle Überlegungen zwischen Geographie und Soziologie. In E. Rothfuss & T. Dörfler (Eds.), *Raumbezogene qualitative Sozialforschung* (pp. 7–31). Wiesbaden: Springer VS.
- Santos, Boaventura de Sousa. 2014. *Epistemologies of the South: Justice Against Epistemicide*. Boulder: Paradigm Publishers.
- Schneidewind, U., M. Singer-Brodowski, K. Augenstein, F. Stelzer. 2016. *Pledge for a transformative science: A conceptual framework*, Wuppertal Papers, No. 191, Wuppertal Institut für Klima, Umwelt, Energie, Wuppertal, <http://nbn-resolving.de/urn:nbn:de:bsz:wup4-opus-64142>
- Schwachula, A. 2019, forthcoming. *Sustainable Development in Science Policy-Making. The German Federal Ministry of Education and Research's Policies for International Cooperation in Sustainability Research*. Bielefeld: Transcript.
- Siebenhüner, B. 2018. "Conflicts in Transdisciplinary Research: Reviewing Literature and Analysing a Case of Climate Adaptation in Northwestern Germany," *Ecological Economics*, Elsevier, vol. 154(C), pages 117-127.
- Shamsavari, A. 2007. *The Technology Transfer Paradigm: A Critique*. Economics Discussion Paper 4. Kingston upon Thames: Kingston University.
- Sillitoe, P. 2007. Local Science vs Global Science: An Overview. In P. Sillitoe (Ed.), *Local Science Vs Global Science: Approaches to Indigenous Knowledge in International Development* (pp. 1-22). New York, NY
- Smith, J. 2009. *Science and Technology for Development*. London: Zed Books.
- Stehr, N. 2018. Modern Societies as Knowledge Societies. In M. Adolf; (Ed.), *Nico Stehr: Pioneer in the Theory of Society and Knowledge* (pp. 309-332). Cham, Switherland: Springer International Publishing AG.
- Stöckli, B., U. Wiesmann, & J.-A. Lys. 2012. *A Guide for Trans-Boundary Research Partnerships. 11 Principles / 7 Questions*. Bern: KFPE.
- Teller, M. & J. Longmuß. 2007. *Netzwerkmoderation – Netzwerke zum Erfolg führen*. Augsburg: ZIEL-Verlag.
- UNDESA. (2015). *Partnerships for Sustainable Development Goals: A legacy review towards realizing the 2030 Agenda*. Retrieved from <https://sustainabledevelopment.un.org/?menu=1300>
- Wiek, A., B. Ness, P. Schweizer-Ries, F. S. Brand, & F. Farioli. 2012. 'From Complex Systems Analysis to Transformational Change: A Comparative Appraisal of Sustainability Science Projects'. *Sustainability Science* 7 (S1) (February): 5–24.
- Wiesmann, U., H. Hurni, C. Ott, & C. Zingerli. 2011. 'Combining the Concepts of Transdisciplinarity and Partnership in Research for Sustainable Development'. In *Research for Sustainable Development: Foundations, Experiences, and Perspectives*, edited by Urs Wiesmann and Hans Hurni, 43–70. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern 6. Bern: Geographica Bernensia.
- Yanow, D. 2006. 'Qualitative-Interpretive Methods in Policy Research'. In *Handbook of Public Policy Analysis: Theory, Politics, and Methods*, edited by Frank Fischer, Gerald J. Miller and Mara S. Sidney, 405–427. Boca Raton, London, New York: crc Press.

Zingerli, C. 2010. 'A Sociology of International Research Partnerships for Sustainable Development'. *European Journal of Development Research* 22 (2) (April): 217–233.