8.3 Translating the discursive leitmotif into discourses of international cooperation and sustainability

As has become clear in chapter 8.1, the core ideas of German science policy, which crystallize in the High-Tech Strategy, guide the BMBF in its main discursive direction and structurally organize the entire ministry's flow of funds. No other strategy – and no other policy discourse expressing itself in a BMBF strategy – has a comparable degree of impact.

Neither FONA nor Internationalisation Strategy nor the International Cooperation Action Plan are completely subsumed under the High-tech Strategy; they exist as documents on their own. However, they are coherent with the High-tech Strategy's objectives. The Action Plan even explicitly states that it will "develop the instruments of the High-Tech Strategy to make them internationally compatible in order to strengthen Germany as a centre of innovation" (BMBF 2014d: 4).

The High-tech Strategy does not discuss international cooperation extensively but mentions it in relation to its function. International cooperation is considered as necessary because "developing competitive products and opening up new markets requires global cooperation" (BMBF 2010c: 9). Although not especially dedicated to fostering international cooperation in science, technology or innovation, the BMBF's core values as bundled in the High-tech Strategy influence all further discourses on science policy. In view of cooperation with developing countries and emerging economies in sustainability research, this means that even though the High-tech Strategy itself is not primarily targeted at either sustainability research nor international cooperation, it nevertheless shapes the larger policy discourse which presets the discursive orientation for research cooperation with developing countries and emerging economies in sustainability.

In contrast, and despite of the encompassing nature of sustainability in its broad definition, as a programme for sustainability research FONA is *not* a cross-cutting strategy for the entire BMBF. It does not suggest or prescribe sustainable research practices or sustainability orientation to research fields beyond those covered in the Sustainability Subdepartment, to which its scope is restricted. In contrast to the leitmotif of BMBF policy, the idea of sustainability is not a part of the ministry's core identity and is not an overall guiding frame for thinking and action. The sustainability discourse has not successfully spread throughout all veins of the BMBF and is far less influential.[4]

4 The symposia on "Sustainability in Science" (SISI) provide further anecdotal evidence for this point. Since 2013, the Sustainability Subdepartment has organized these conferences in order to foster sustainability in the larger German science landscape (BMBF 2016e). However, the first symposium in 2013 revealed that high level ministerial staff still considered the topic of sustainability as less important (and essentially incompatible) to the BMBF's core discourse on high tech and innovation: On the same date, a strategy-building event for the High-tech Strategy on

Following from the argumentation that the BMBF's core ideas are condensed in the High-tech Strategy, I argue that neither the policy discourse on sustainability nor the policy discourse on cooperation with developing countries and emerging economies are comparable to the BMBF's core discourse in view of their scope and standing. The discourse of an economy-oriented science policy fulfils the function of a legitimating, underlying leitmotif, which reflects in all related policy discourses, and thus can be described as an historical a priori in preceding, enabling and permeating all further science policy discourses, hence functioning as their *conditions of possibility* (Foucault 1972a; Keller 2005). In case of the specific policies for cooperation with developing countries and emerging economies in the field of sustainability research, the pre-existing core discourse of the BMBF provides the grounds that enabled its emergence and further coins its direction. The specific discourse on cooperation is entrenched in the preceding core discourse and its dispositive. The core discourse strongly influences which knowledge is accepted as legitimate in the policy subdiscourses, and thereby provides a frame to the possible contents, legitimations, and objectives of the discourse on cooperation with developing countries and emerging economies as well as to other special science policy discourses such as sustainability research (figure 8-1).

In order to understand the specific policy discourse on research cooperation between Germany and developing countries and emerging economies, it is necessary to acknowledge the guiding framings through the core discourse as well as through the (sub)discourses on sustainability and on international cooperation.

According to SKAD, discourses interact with and can be set into relation to other discourses: They may be hierarchically arranged, exist parallelly on equal footing, or exist in nested and interconnected relation to other discourses (Keller 2001). In case of the BMBF, the production and reproduction of the specific policy discourse on cooperation with developing countries and emerging economies, take place within the larger and hierarchically superior core discourse of German science policy and its related dispositive. The BMBF as such, as an institution, including its core discourse and dispositive, precedes the specific discursive conceptualisations of research cooperation with developing countries and emerging economies and exists independently of it. The discourse on cooperation with developing countries and emerging economies is embedded within this larger core discourse. In other words, the influence of the BMBF's core beliefs on the discourse on cooperation with developing countries and emerging economies is not reciprocal. While the core discourse strongly influences the discourse on international

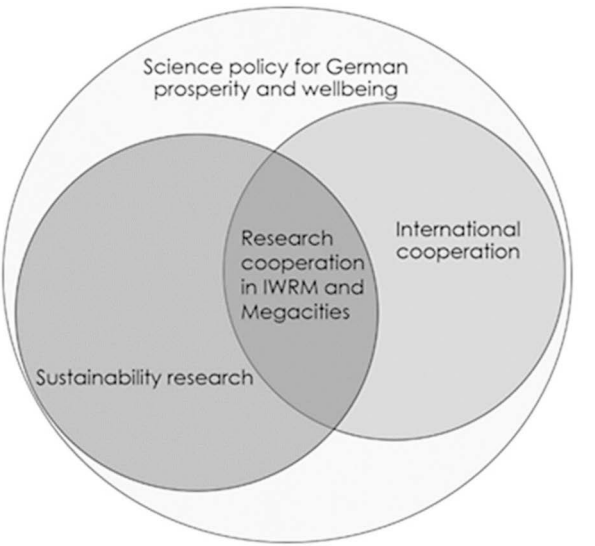
„Prosperity through Research and Innovation" (BMBF 2013f) took place. While BMBF state secretary Schütte opened the Sustainability in Science event, BMBF minister Wanka as well as three state secretaries attended the high-tech event, thereby symbolically underlining the political predominance of the latter (fieldnotes on SISI, 23.4.2013).

cooperation (and on sustainability discourse as such) the latter do not influence the core beliefs. They rather seem to be subordinated to it, and exist only as an add-on, not as a delimited, separate discourse. In conclusion, I argue that the discursive conceptualisations of sustainability as well as international cooperation in the BMBF discourse follow from the core ideas of general science policy, i.e. to foster German prosperity through research and education.

8.3.1 Influence of the BMBF's core discourse on international cooperation

As the previous sections have shown, the BMBF is primarily orientated towards policies for *national* wellbeing. This sets it off from other German federal ministries, such as the BMZ or the AA, which are internationally oriented by definition – their main purpose is to guide international policies and cooperation. Accordingly, the BMZ and AA derive their *raison d'être* and main narrative from international relations and cooperation, while the BMBF legitimizes its general mandate by stating that it fosters prosperity based on science, education and education. In this larger context of a science policy dedicated to contributing to national objectives, international cooperation is mainly conceptualized as a tool of securing German interests of different kinds.

Figure 8- 1: Embeddedness of discourses in BMBF policy



Source: Own elaboration

This is not a recent development: The BMBF and its predecessors have funded international cooperation in science since the initial days of the new German democracy after the Second World War. While Schütte (2010) argues that international cooperation was originally motivated by the need to reintegrate Germany into the international community and to build up trust in the new democratic state, some interviewees recollected that since its beginnings, the motivations and objectives of international cooperation – especially in view of cooperation with developing countries and emerging economies – were based on German interest in exporting technologies (interviews with PA12, PA14). Historically, cooperation in science thus has not been funded for its own sake, but as a means of pursuing a further goal. In this line, the BMBF still states that "[a]n international dimension is not a value in itself" (BMBF 2008a: 11). International cooperation continues to be fundamentally driven by national objectives, as from the perspective of interviewees, "[o]ur main task is to safeguard the German position as a centre of excellent science and research. And the international dimension is part of that" (PA07). Following, the BMBF dedicates a share of its budget to international cooperation activities and directs policies at international cooperation in research in order to fulfil the overall national goals. The arguments commonly used to legitimize expenditures on international cooperation are bundled in the Internationalisation Strategy as well as the follow-up International Cooperation Action Plan (BMBF 2008a; 2014e). These strategies, congruent with the overall leitmotif of the BMBF, are meant to provide an overall frame to the BMBF's international activities. However, as in I maintain in chapter 7, the Internationalisation Strategy does not have a prescriptive character – it does not guide future actions beyond the boundaries of the International Department. Nevertheless, in providing arguments for international cooperation in sustainability research, the Sustainability Subdepartment does not substantially deviate from the Internationalisation Strategy. I therefore argue that the Internationalisation Strategy fulfils a different, important function: It provides a repertoire of broadly accepted arguments that the thematic departments can make use of in order to legitimize international activities both vis-á-vis other thematic BMBF departments as well as externally.

As the Internationalisation Strategy's full title suggests, the main objective of the BMBF's international cooperation endeavours is "Strengthening Germany's role in the global knowledge society". In order to reach this overall objective, the Internationalisation Strategy identifies four major fields of action as targets of German science policy for international cooperation: First, "Strengthening research cooperation with global leaders" (BMBF 2008a: 21), second, "International exploitation of innovation potentials" (BMBF 2008a: 25), third "Intensifying the cooperation with developing countries in education, research and development on a long-term basis" (BMBF 2008a: 27), and fourth, "Assuming international responsibility and mastering global challenges" (BMBF 2008a: 29). As these different fields of action show,

the Internationalisation Strategy is a source of diverging, but co-existing strands of argumentation that back up international cooperation. Arguments range from direct benefits, such as strengthening German science and innovation through tapping international sources of knowledge, to indirect benefits, such as taking over global responsibility, responding to demands of international politics or science diplomacy.

The process of creating political strategies itself may have led to this broad range of arguments included: "Generally, all programmes, including the Internationalisation Strategy, avoid at all costs to minimize the room for action, so you can do as much as possible, as you cannot foresee everything." (PT08)

In consequence, strategies often provide room for multiple legitimations, which ensures their persistence even in change of political leadership. In addition, the multitude of arguments also mirrors the public service's take on how action should be justified: "The rationale behind international cooperation consists of many layers. Public action likes to try to bundle up very diverse goals." (PA07)

This is reflected in interviews and documents on specific funding initiatives. Instead of exposing a single objective, parallel goals intermix within them. In the practice of project funding, the variety of arguments included is favourable, as it facilitates finding suitable legitimisations for international cooperation. As arguments are part of an official governmental strategy, they seem salient and legitimate to the public, while at the same time they are accepted and shared knowledge within the discourse coalition.

8.3.2 German benefits as primary rationale of international cooperation

As cooperation takes place within the frame of the larger policy discourse of German science policy, it is not surprising that safeguarding German interests and German benefit is as prominent strand of argumentation for cooperation. Two entry points for this line of argumentation exist – first, benefits for German research as such, and second, benefits beyond research.

According to the Internationalisation Strategy, the main objective of cooperation with developing countries and emerging economies is to position Germany as a "partner of future new science and industry centres in developing countries and emerging economies" (BMBF 2008a: 27). A high-level BMBF representative shared similar ideas in view of emerging economies, stating that "[t]here are some highly interesting research partners, such as Korea… and in Africa there are some regions, such as medical research in South Africa, which are top-notch. There are enough things that you can and must have mutual scientific interest in" (PA11). Here, cooperation is aspired because the partners seem worthwhile to invest in cooperation. In the BMBF's view, some emerging economies have already acquired a scientific level high enough to inspire German interest as such – the motivation to cooper-

ate is thus accessing knowledge, or in an interviewee's words, "of course, that's the increase in knowledge and the access to knowledge in other countries" (PA06).

The BMBF discourse on cooperation with industrial countries resonates in these statements. German science is perceived to stay competitive only through interlinking with excellent research internationally. In this line of argumentation, cooperation with emerging economies is consequently funded in order to strengthen the German science and research landscape. The same idea underlies cooperation with developing countries:

> "In view of developing countries, it was the idea that at least in specific aspects there is a large potential. Not in breadth, but we are interested in identifying the potentials and to cooperate at least in certain topics with developing countries in order to develop more from there on." (PA09)

While they may not be strong in many areas of research yet, and thus lack broad excellence in science, developing countries might turn into interesting partners in the future, once their science systems improve (interview with PA01). Cooperation now is a strategic means to introduce Germany as a partner now and yield a return later:

> "Developing countries and emerging economies are the blossoming science nations. In view of publications and patents, they have the largest increase, or whatever you take as an indicator. Iran did the largest leaps forward in the last ten years, in relative terms. We therefore have a large interest in cooperating from early on, in view of their excellence. They are now leaping forward and will massively invest in science." (PA07)

Next to the access to research partners with potentially relevant scientific knowledge, a further rationale of funding research cooperation with developing countries and emerging economies is the access to research subjects abroad. The BMBF acknowledges that even applied research projects may be essentially driven by scientific interest. Within this line of thinking, funding projects in cooperation with developing countries and emerging economies grants access to research subjects abroad to German researchers (interviews with PA10, PA11). Project Management Agency staff reflected on the standard approach of research in developing countries and emerging economies in the past, which conveyed an inkling of colonial thinking:

> "Direct benefits [for the German partners] are in it when scientific interests are pursued. Traditionally, research funded by the BMBF had an after taste, they funded cooperation only if they were a research object, such as in view of geographic regions, biodiversity which doesn't exist elsewhere, and which was to be studied abroad. So, you go there, but you don't cooperate with the countries, or

> only to a certain extent, but you rather conduct research in the countries. And when you are done, you leave, and that's that. Then you clean up a bit." (PT04)

Indeed, access to research subjects abroad remains an essential argument of funding cooperation even today: "The added benefit for Germany is that research questions are worked on that researchers are interested in. That is the reason for existence of institutions such as ZEF… ZEF researchers don't have to stay in Bonn, they can go to Africa and collect data there." (PA13) Next to a rationale of strengthening research through cooperation, another argumentative storyline has evolved around German economic interests. Emerging economies increasingly play a role in international politics beyond science policy. Based on their past and/or ongoing economic growth, high level political exchange fora such as the G20 summits take place regularly since 2008 (Bundesregierung 2017b). According to interviewees, the BMBF wishes to acknowledge this increasing international political and economic standing through intensifying cooperation (interview with PA09). Emerging economies as well as developing countries are conceptualized as import and exports markets – and research cooperation accordingly is portrayed as a way forward to unlock the door to these new economic arenas: "Such countries will be key players in the global competition of the future, and they thus offer considerable opportunities for development of new markets." (BMBF 2014e: 84) Or, as an interviewee put it: "In emerging economies such as Brazil, India or China it's evident. It's the growing scientific and technological potential seen there, their markets, their size. They play a role on the world market now." (PA09)

In the BMBF's conception, through research cooperation, Germany introduces itself as a reliable partner for other areas of interaction as well, such as economic cooperation and trading goods. Interviewees therefore suggested that strategic reasons played a role in fostering cooperation with those countries considered as promising in market terms. For example, economic motivations led to intensive cooperation with China (interviews with PT02, PT03, PA05). The core discourse of BMBF policy, to promote German economic prosperity, hence played a role in the choice of partner countries and topics.

In the BMBF's conceptualisation, markets encompass a broad scope. Next to the access to scientific knowledge and to research subjects, the BMBF is interested in importing human as well as natural resources from emerging economies and exporting own (technological) products or innovations. The idea of access to resources abroad is closely coupled to the rationale of strengthening the German science system through cooperation with internationally excellent researchers (to be): "And in its cooperation with newly industrialized countries, it seeks to concentrate on excellence and to develop it, to mutual benefit. Its efforts include working to develop markets, and to attract highly qualified skilled personnel." (BMBF 2014e: 24)

Legitimating research cooperation as a tool to expand markets in developing countries and emerging economies through research cooperation is one of the most common arguments in research funding for international cooperation. As such, it is widely repeated in interviews and policy documents of all kinds from strategies to calls for funding. Potential is seen for German technologies as well as for service supply such as vocational training schemes. In view of cooperation countries in Latin America, an interviewee stated:

> "Of course, we cooperate only with the Latin American emerging economies, the big ones. Well, with some developing countries as well by now. But in the emerging economies, our motivation is a different one. The typical BMBF motivation of cooperation on eyelevel and we need to really have a concrete benefit for Germany. We do not cooperate to strengthen the partner countries or support them. The motivation is different. The first case of a different approach is Peru. But in the end, we wish to gain access to resources, raw materials, the educational market there as well […] that is the educational market in view of vocational training, for German providers who would like to extend to the Peruvian market." (PT05)

This statement – as well as those by other BMBF employees, highlights the variety of co-existing arguments for cooperation, which nevertheless all aim to contribute to a *German benefit* as a main objective. The quote also illustrates that *cooperation on eyelevel* is not aspired as a mode of cooperation for its own sake – but is employed to correspond to the cooperation objective (ch. 9).

8.3.3 Sustainable development and international cooperation

As pictured in chapter 8.2, under the umbrella of sustainability as an accepted programmatic frame for research and funding, the scope of environmental research funded by the BMBF broadened, increasingly including social and economic aspects of sustainable development next to purely environmental approaches. This wider scope was accompanied by corresponding research paradigms as well as an increase of international cooperation within this area of research funding increased (ch. 5). The parallel surge of sustainability as a programmatic frame and the increase of international cooperation suggests a connection. The shifting discourse from environmental research to sustainability research opened up pathways to intensified international cooperation by providing new arguments for cooperation. With the global dimension as inherent part of the concept sustainability, the rationale of *global responsibility* surged in BMBF funding for cooperation in sustainability research with developing countries and emerging economies. However, the deeper analysis of funding rationales shows that framing sustainability as global challenge is commonly coupled with further funding rationales. Rarely, intervie-

wees emphasize a single motivation of funding, but rather list parallel objectives which combine into the funding rationale.

The concept of sustainability in the BMBF's interpretation coins FONA (ch. 8.2). Next to the general motivations laid out in the Internationalisation Strategy, FONA functions a second *pool of arguments* that policy makers can legitimately draw on to provide arguments for funding international cooperation – in case of FONA specifically in sustainability research: "The goals that the BMBF pursues in cooperation between Germany and developing countries and emerging economies are part of FONA, in its strand on global responsibility and international networks. There are structures in the programme that we build upon." (PA11)

In interviews as well as strategic BMBF documents, the financial and strategic focus on international cooperation in sustainability research is commonly legitimized through pointing at the global dimension of environmental challenges. In this line, the BMBF states in FONA2 that "[r]esearch for sustainability is international – and the only way to provide answers to the global challenges looming in the fields of climate, resources, health, safety and migration" (BMBF 2009a: 11). FONA3 continues with the same line of argumentation:

> "Sustainability is an issue of global importance. Problems like climate change and resource depletion cannot be solved by any nation singlehandedly. Consequently, by reinforcing the international partnerships for sustainability with its framework programme FONA^3, the BMBF is assuming responsibility on an international level." (BMBF 2015e: 8)

Sustainability is thus conceptualized as an issue of global scope and global responsibility. In the Sustainability Subdepartment, the decision for or against international cooperation consequently depends on the conceptualisation of the thematic focus as one international dimensions and global scope, which makes the international orientation of research funding seem legitimate. In this vein, interviewees state that international cooperation in sustainability is an obvious choice because it is thought to require cooperation: "My tendency is to say that the logic of the topic sustainability, which is an international topic, facilitates international cooperation." (PA03)

Problems have a global dimension; they pose a shared challenge and tackling them is thus of shared duty. The science to solve global problems should be equally global in its orientation, according to the arguments brought forward. It is not necessarily an altruistic notion that underlies the idea of cooperation for solving global challenges. Rather, the BMBF acknowledges that German wellbeing relies on jointly solving global problems through research:

> "Our role is to fund research, including for societal wellbeing. And you cannot deal with certain topics nationally and on smaller scales of cooperation. Climate policy

> is a good example for this. It is necessary to cooperate especially with countries that are affected and that might ask different questions. And often, these are developing countries and emerging economies." (PA09)

In view of global sustainability problems, research cooperation is thus conceptualized as a means to creating solutions on a global scale, as German scientists are expected to cooperate with partners worldwide to develop globally robust solutions (BMBF 2016d). From the BMBF's perspective, impact of research on global challenges is reached only through international networking. At the same time, it is believed to increase excellence, as "[r]esearch on global challenges can only achieve excellence and be effective as part of an international network. Therefore, international cooperation is an integral element of FONA^3" (BMBF 2015e: 29).

In supporting international cooperation, the BMBF also fulfils international political obligations – for example in view of agreements among the G8, such as on challenges on globalisation, signed at the G8 Summit in Heiligendamm in 2007 (BMBF 2008a), UN-conventions on biodiversity conservation, or in view of climate change (interview with PA07). These international political frames are used as an additional justification in the Internationalisation Strategy and FONA in order to attach authority to the arguments for cooperation with developing countries and emerging economies. However, pointing to the obligations seems to be rather fulfilling a back-up function, they were never mentioned as primary objective.

In chapter 9 and 10, I demonstrate that the broad conceptualisations of global sustainable development are not commonly transmitted into concrete funding initiatives. The policy discourse is thus not translated into the practice of funding. In addition, it often leaves out social and economic dimensions of global sustainable development.

8.3.4 Social and economic development as effect of cooperation?

While commonly, sustainable development is defined as a phenomenon encompassing social, economic and ecological dimensions, the BMBF's conceptualisation of sustainability, especially in its relation to international cooperation, is focused on environmental aspects. Although previous strands of environmental science policy were broadened, the BMBF did not adopt the concept of sustainable development in all its dimensions. Even if research cooperation is framed as research for sustainable development, the sections above demonstrate that global sustainable development, which encompasses aspects of global justice or social equality, is *not* targeted. It is not the main objective of the BMBF's policies for cooperation with developing countries and emerging economies to create benefits in the partner countries in form of development abroad. Other rationales drive German science policy in sustainability research. Following, there are no public strategy documents

or concepts which summarize the BMBF's conceptualisation of the general effects of science cooperation on development – apart from very generic statements found in the Internationalisation Strategy or the Action Plan. Likewise, many BMBF employees seemed irritated about my question regarding the BMBF's conceptualisation of science and (sustainable) development and evaded an answer. In retrospect, the fact that interviewees escaped the question or harshly reacted to it is quite telling. The interviewees' reluctance, irritation or lack of knowledge is a further indication that structural impacts of science in partner countries are not a core concern of the BMBF.

Of the different BMBF employees interviewed, only one interviewee within the international department was able to describe the BMBF's theory of how science affects development on a structural level and beyond environmental aspects:

> "Well we think that the leap… well that's theory with little evidence…well we always say that… innovation landscapes, we need innovation businesses and capacities for innovation, and that's what makes us successful. And the same holds true for developing countries and emerging economies. If a good research landscape and differentiated tertiary education exist, including vocational training as an important aspect, then there are capacities to develop wealth. Prosperity in Germany developed after the Second World War through vocational education, higher education of engineers, who turned into business men, who developed products. And in our opinion, the same development model should be applied by developing countries and emerging economies." (PA07)

While the interviewee acknowledged that science might also contribute to building a critical mass of intellectuals, in his concept science is put into the context of innovation and related economic aspects, as in the BMBF's core rationale. Ideas of catch-up development shine through in the statement. Other interviewees rather related to concrete examples of funding initiatives instead of abstracting concepts of development from these. This mirrors the level of conceptualisation in official ministerial documents. While in calls for proposals for specific funding initiatives, the BMBF does envisage benefits for partner countries in form of solving concrete problems, often related to issues otherwise framed as development issues (ch. 9, 10) in more the more generic view of *structural impacts*, the ministry remains quite silent.

In strategic documents such as the Internationalisation Strategy, the BMBF argues that cooperation is beneficial for the partner countries, despite of serving German interests as a primordial objective. The BMBF emphasizes the idea of strengthening science systems, such as through the "support for the establishment of professional organisations of scientific self-government, effective higher education management structures and the development of individual research management skills" (BMBF 2008a: 28).

Cooperation – including capacity development measures – is thereby believed to prevent brain drain (interviews with PA08, PT04). In contrast to the legitimations for national science funding, however, the BMBF leaves astonishingly blank how *exactly* science cooperation might contribute to wellbeing in partner countries, which the following quote illustrates:

> "Providing training and advanced training for researchers from developing countries and strengthening the scientific infrastructures in these countries contributes to their participation in scientific progress and helps achieve the Millennium Development Goals of the United Nations." (BMBF 2008a: 17)

The argument thus explicitly refers to the expected benefits of science for social and economic development in the partner countries as defined in the MDGs. This, in turn enables the partner countries further, according to the Internationalisation Strategy, as "developing countries can thus participate as equal partners in the global knowledge society and in the solution of global problems" (BMBF 2008a: 17). Summarized, the line of argumentation is that cooperation in science helps developing countries in achieving development goals and to become partners on the global scale. In view of emerging economies, the BMBF similarly claims that cooperation benefits the poor shares of the population:

> "Only about one-third of the very poorest people now live in 'developing countries'; two-thirds live in newly industrialized countries. Cooperation with newly industrialized, and economically emerging, countries is becoming increasingly important, and such cooperation thus often simultaneously involves practical efforts to combat poverty and its consequences." (BMBF 2014e: 24)

However, the ministry leaves open which chain of effects, interdependencies or mechanisms turn science into a means of poverty reduction or development and in which way scientific cooperation thus trickles down to those poor parts of society. The conceptualisations are not encompassing deeper causal explanations of any correlations between science, innovation and economic prosperity – or any other dimensions of social or ecological wellbeing. For example, the Internationalisation Strategy states that cooperation in research and education will lead to "the development of scientific excellence in the interest of a sustainable economic, social and political development of the partner countries" (BMBF 2008a: 27). It leaves open, however, why scientific excellence shows the way to sustainable development.

Similarly, research cooperation, capacity development and regional networking of existing scientific structures are pictured as basis of regional economic growth and social wellbeing in the Action Plan as well (BMBF 2014e). Beyond establishing a relation between these concepts, no causalities or interconnections between the concepts are explained. For example, it is left open, why the BMBF considers im-

portant that elites remain in the country. While probably, the underlying argument is a stable formal labour market, this is not made explicit.

The common lack of further elaborations of the interlinkages of science and development points at a phenomenon of *black boxing*. In constantly repeating an abstract idea of interlinked science and development processes, the BMBF presents the connection as a given fact which does not require further explanation. As a natural fact, there is no need to expose *why* science is important for the partner countries – its role is apparently self-evident: Science inevitably leads to economic development. This strategy narrows the room for questioning if the BMBF funds cooperation with developing countries and emerging economies in the most promising mode, on the most relevant topics.

In conclusion, although the BMBF points at development aspects as a positive side effect of concrete funding initiatives for cooperation with developing countries and emerging economies in sustainability research, social and economic development in the partner countries is rather an add on, not a core part of the BMBF rationale. A broader and deeper reflection on development does not fit the ministry's storyline on cooperation. I argue that this is also a result of the separation of sustainability and development into two concepts and the exclusion of social and ecologic dimensions of development from sustainability research funding (ch. 10). As the sections above show, development abroad serves as an add-on to the primary arguments of German interests, but it does not function as a rationale on its own. Even contributions to the MDGs are portrayed in lines of German indirect benefits. Thus, although BMBF activities are listed as expenditure as Official Development Aid (ODA), and although cooperation between Germany and developing countries and emerging economies is sometimes backed up through drawing on developmental aspects, development is never used as an outstanding primary argument.

8.4 Policy rationales as elements of political identity and symbols of difference

In view of an overarching rationale for the field of cooperation with developing countries and emerging economies, an unease can be perceived among the BMBF staff. It seems as if the ministry was struggling to find a shared conceptualisation of its endeavours, which at the same time would allow the BMBF to clearly delimit itself from other ministries:

> "We haven't really answered the question for the ministry as a whole – why, what for, and how – the cooperation with developing countries. We also enter the territory of a different ministry that we are not as familiar with. And we don't want to