



EVALUATION OF CLIMATE CHANGE ADAPTATION MEASURES

Portfolio and Allocation Analysis

Executive Summary

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EXECUTIVE SUMMARY

Background, Objectives and Subject of Evaluation

Development policy is an integral part of German climate policy. Already for the period 2011-2017, around a quarter of Germany's official development assistance funds were allocated to the German Federal Government's international commitment to climate policy. For 2020, the German Federal Government has committed a target value of four billion EURs in new annual public budget funds.

Climate protection and climate change adaptation enjoy political parity. The equal importance of the two pillars of international climate policy is determined by the United Nations Framework Convention on Climate Change and is shared by the German Federal Government. This positioning is rooted in a growing awareness that despite of (or because of insufficient) climate protection, certain consequences of climate change are either already apparent today or will occur in the future, making it imperative that adaptation measures are taken. According to the assessment of the Intergovernmental Panel on Climate Change, climate protection measures seek to reduce greenhouse gas emissions, while adaptation measures address actual and expected climatic conditions and their impact. The aim is to mitigate potential damage and exploit beneficial opportunities provided by climate change.

For some years now, the German Federal Government has been attaching increasing importance to climate change adaptation measures. Today Germany is one of the largest aid donors in the field of climate change adaptation finance within the Organisation for Economic Cooperation and Development (OECD). German development cooperation (DC) promotes adaptation measures in a number of different regions and sectors. The predominantly bilateral, project-based approaches address challenges, ranging from gradual climate change to the increase in extreme weather events. Germany's technical cooperation (TC) and financial cooperation (FC)'s adaptation tools include nature-based options, infrastructure measures, promotion of institutional and regulatory frameworks, financial market development and information technologies. In recent years, most of Germany's contribution to international climate finance has been implemented through the Federal Ministry for Economic Cooperation and Development (BMZ). The German Federal Government's overall international climate policy commitment extends to various programmes and projects run by other ministries, for example in the scope of the Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)'s International Climate Initiative (ICI). The primary governmental implementing organisations are the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and KfW Development Bank (KfW). A number of multilateral and non-governmental organisations are also putting adaptation measures supported by Germany into action.

In line with the increasing importance of climate change adaptation in the context of international and German climate policy commitment, a growing number of studies and evaluations are addressing questions with regard to the significance and success of adaptation measures. At the same time, there are considerable gaps in evidence in this comparatively new field of DC, and certain major questions concerning the relevance, effectiveness, efficiency, impact, sustainability and policy coherence of the German adaptation portfolio have not been answered to date. Offering a sequence of different evaluation modules, DEval seeks to contribute to closing the existing gaps in evidence. The portfolio and allocation analysis at hand is the first evaluation module in the overall evaluation.

The study is DEval's contribution to the promotion of strategic development of the German DC's climate change adaptation portfolio. The objectives of the study include an analysis of German portfolio allocation patterns in comparison with (inter)national strategies and agreements as well as an examination of the factors influencing effective allocation decisions. The focus of the study at hand are the total official development assistance funds for adaptation measures. Due to the high proportion of total commitments, the study's emphasis is on the BMZ portfolio. The evaluation period covered by the study is 2011 to 2017.

The overarching evaluation question (EQ) central to the portfolio and allocation analysis is as follows:

To what extent is the German adaptation portfolio relevant and coherent with regard to global development agendas and the priorities of those involved and affected?

The overarching question comprises the following sub-questions:

- EQ1 To what extent is the portfolio consistent with international development agendas and German priorities?
- EQ2 To what extent does the portfolio reflect the priorities of the development partners and the scientific evidence?
- EQ3 To what extent does the allocation of adaptation commitments relate to climate vulnerability in partner countries?
- EQ4 To what extent are the approaches and tools of various actors of German development cooperation complementary and coherent?
- EQ5 To what extent are the approaches of the German development cooperation complementary and coherent to the policies of other bilateral and multilateral aid donors?

Methodological Approach

The evaluation's methodological approach is based on theory-building and theory-testing procedures within the scope of a macro-quantitative portfolio and allocation analysis. The evaluation combines statistical data analysis with document analysis and qualitative interviews. Such an approach is suited to the evaluation of cross-sectoral issues, which are usually connected to different thematic or sectoral strategies and can therefore rarely be dealt with using strictly deductive evaluation approaches. The theory-building component operationalises the research interest through empirically verifiable expectations or assumptions. The theory-testing component confirms or refutes the identified expectations and forms the basis for this evaluation module's conclusions and recommendations. The central data base for this study is the creditor reporting system of the OECD's Development Assistance Committee (DAC). The OECD data is supplemented with statistical data from other organizations, publicly accessible strategy documents, scientific literature and interviews with key informants.

Key Results, Conclusions and Recommendations for Assessing the Relevance of the Adaptation Portfolio for Development Cooperation

Compliance with Relevant Strategic Frameworks and (Global) Agendas

In consideration of the German Federal Government's objectives, the study at hand assumed that Germany's commitments in the international climate policy sector will increase over time and approach the target value of four billion EUR in public funds by 2020. With these objectives, Germany is conforming to its own standards and committing itself to the goals of international climate finance. Based on OECD data, a significant increase can be observed for commitments of public funds over the period 2011-2017: By 2017 commitments were already at three billion EUR, and so the target value of annual new commitments of four billion EUR is likely to be met by 2020. To date, however, it remains unclear whether Germany will commit itself to comparable target values beyond 2020.

In German and international climate policy, both pillars of climate protection and climate change adaptation enjoy equal political importance. Against this background, the study at hand assumed that the overall increase in funds over the past years would be reflected in expanding budgets for both climate protection and climate change adaptation. This expectation can be confirmed on the basis of OECD data for the proportion of public fund commitments and also reconstructed on the basis of the German Federal Government's reporting to the United Nations. In terms of overall international climate commitments, about as many public funds have been allocated to climate change adaptation as to climate protection.

However, in comparison with climate protection, significantly more adaptation funds are implemented through projects with significant climate activities (and less through principal climate activities). Furthermore adaptation measures are mainly based on public subsidies and receive much less market funding through German FC. A highly probable increase in global demand for adaptation measures will pose new challenges for the current finance design of German adaptation measures. Thus, the expectation that the political parity between climate change mitigation and adaptation will also be reflected in allocation patterns (separately for public subsidies and market funding) can only be partially confirmed.

In view of the discussion about a "financing gap" in international climate finance and corresponding German strategies, the study at hand assumed that German DC is increasingly supplementing public funds with private funds. Only data from FC was available to review this expectation. The results showed that hardly any private funds had been mobilised in the field of climate change adaptation thus far. Due to the limited data availability, however, a final evaluation was not possible and so further analysis is required in the course of the overall evaluation.

In addition to the involvement of private funding sources, it was also expected that the proportion of adaptation funds implemented through civil society would increase overproportionately in time. The expectation cannot be confirmed on the basis of OECD data at this point. On the contrary, the proportion of total commitments implemented through civil society has remained consistent at around 10 percent. Since many civil society organisations are not eligible for loan funds, the trend analysis was also carried out for the grant funding sub-sector only, and the findings show no increase for the evaluation period. The proportion of civil society in the allocation of grant funds remains constant at around 16 percent. Interviews with representatives from politics and civil society have revealed controversial answers to the question what proportion of public funds from adaptation-related DC would be appropriately implemented through the civil society channel. This leads to the following recommendation:

Recommendation 1:

BMZ should examine the causes of stagnating developments of the portfolio relating to civil society engagement and develop measures in consultation with civil society to achieve an appropriate increase in the proportion of funds implemented through civil society actors.

Germany's international climate policy is subject to a number of international agreements. The level of compliance with relevant frameworks forms a further part of the relevance evaluation. In concrete terms, the study at hand assumed that German strategies were consistent with the international agreements of the Paris Agreement, Agenda 2030 for Sustainable Development, the Sendai Framework for Disaster Risk Reduction and the New Urban Agenda. In addition to the relevant strategy documents and agendas, the basis of assessment for this assumption was formed by statistical data from OECD and interviews with representatives in policy and implementation. As a result, basic compliance of German DC focal points with aforementioned international agreements can be confirmed. The level of financial commitments, the objectives for establishing new partnerships or support of a comprehensive approach to dealing with climate risks are politically consistent with international adaptation goals. Furthermore German DC focuses on relevant adaptation tools and increases the promotion of climate risk insurances' visibility through global partnerships, for example.

German DC does not, however, have a stand-alone climate or adaptation strategy. BMZ currently locates its climate policy priorities in a variety of sectoral and regional strategies. Thereby climate change adaptation is also part of general risk management, including disaster risk management and transitional aid/reconstruction. BMU's climate policy priorities are included in individual funding lines of the ICI. Against this background, the level of compliance with strategic reference frameworks and (global) agendas can only be evaluated to a limited extent in the scope of the study at hand. Further evaluation work within the framework of the overall evaluation is required.

Compliance of the Portfolio with the Needs of the Target Groups, the Partners' Objectives and Scientific Evidence

German DC emphasises partner orientation as the guiding principle in the process of expanding the adaptation portfolio. Against this background, the study at hand assumed the partner countries' priorities to be reflected in the effective allocation patterns. The review of this assumption is based on a comparison of information about the partner countries' respective Nationally Determined Contributions (NDCs) with the OECD allocation statistics. The results of the analysis indicate a partner orientation. However, the partner countries' sectoral priorities have had only limited influence on the actual distribution of adaptation funds so far. As an incipient tool of the United Nations Framework Convention on Climate Change, NDCs have a number of methodological limitations and so the findings are not reliably conclusive with regard to causal links and relationships. However they give a clear indication that there is scope to further increase partner orientation within the framework of sectoral priorities. A comparison of all adaptation funds in the agriculture and food security sector shows that there is already a high level of partner orientation, while the trend is much less pronounced in the field of biodiversity. This leads to the following recommendation:

Recommendation 2:

BMZ should continue to support the partner countries in the implementation of NDCs and take these into account even more than previously throughout the process of establishing climate change adaptation priorities in the individual partner countries.

Furthermore the portfolio and allocation analysis assumed that commitments in the field of climate change adaptation focused on sectors and tools backed by strong evidence of the respective measures' effectiveness. This expectation is premised on the assumption that scientific evidence of the effectiveness and efficiency of DC tools plays a potential role in the allocation of limited funds. To engage with this possible connection, the evaluation draws on the results of an Evidence Gap Map (EGM) prepared by DEval in collaboration with the Green Climate Fund. The study found no clear link between the allocation of adaptation funds and rigorous scientific evidence for the effectiveness of adaptation measures. Sectors with a high level of evidence benefit from adaptation tools as well as sectors where there is currently little scientific evidence for effectiveness. The use of funds for certain tools is also not statistically related to scientific evidence. Thus, the initial expectation of evidence-based policy decisions cannot be confirmed with regard to the adaptation portfolio.

Supporting the countries and people most affected by climate change is one of the central objectives of German DC in the field of climate change adaptation. In this context, the allocation analysis was premised on two expectations: Firstly, it was assumed that increasing climate vulnerability would have a positive impact on the probability of a country receiving adaptation funds and on the level of committed funds. Secondly, it was expected that the poorest partner countries and the Small Island Developing States (SIDS) would receive overproportionately high level of per capita funds for adaptation measures. The study examined the impact of different levels of vulnerability on commitments – controlling for important country-specific characteristics – with the help of multivariate regression analyses. The analysis shows that climate vulnerability significantly increases a country's probability of receiving German adaptation finance. The more vulnerable a country is, the more likely it is to receive funding for adaptation measures. In addition, Germany is more likely to make commitments to countries with low adaptive capacity. However, the SIDS, which are often severely affected by the consequences of climate change, are particularly unlikely to receive German adaptation commitments. Countries vulnerable to climate change also do not receive a consistently higher level of commitments. The group of SIDS actually benefit below average from German adaptation commitments. Considering the overall findings on the relationship between climate vulnerability and the allocation of German funds, it can be concluded that countries with high level of exposure and sensitivity to the negative consequences of climate change and with low adaptive capacities are more likely to receive German adaptation commitments and also tend to receive a higher level of funds. The results only partially confirm the expectations and demonstrate limited relevance with regard to the needs of the target groups. This leads to the following recommendation:

Recommendation 3:

Against the background of international agreements that support countries particularly vulnerable to climate change and Small Island Developing States, BMZ should consider the partner countries' respective climate vulnerability when allocating adaptation funds, to attach increasing importance to climate vulnerability in future as a factor in allocation decisions in the field of climate change adaptation.

Complementarity and Coordination

Within the framework of DC, the German Federal Government's climate policy is attached to several federal ministries. BMZ is responsible for most of the funds. BMU also funds a number of relevant adaptation projects through ICI. In accordance with the German Federal Government's claims with regard to complementarity and coordination between the individual federal ministries, the evaluation assumed that the federal ministries respectively set their own funding priorities, which are complementary and interlinked. To review this expectation, statistical data analysis was supplemented with key informant interviews. In the process, complementarity of BMZ and BMU priorities was revealed on policy level of the German adaptation portfolio. However, currently neither a common strategic framework nor systematic and active coordination of a joint commitment in the field of climate change adaptation exist, and so the different procedures, approaches and regional priorities merely indicate interministerial synergy potential. In this case, more in-depth studies are required within the scope of the remaining evaluation modules.

In addition to the expectation of complementarity and coordination at policy level, the study was premised on a collaborative implementation of measures. The sectoral cooperation between GIZ and KfW was examined as an example. Statistical data analysis was supplemented with interviews. At implementation level, the study at hand did not indicate any specific factors that would obstruct the coordination efforts of German TC and FC in the field of climate change adaptation. GIZ and KfW implemented most of the adaptation measures in the priority sectors water, agriculture and environmental protection. Climate change adaptation measures in these sectors promise the greatest synergy potential. Whether the two implementing organisations work coordinately and collaboratively cannot be conclusively assessed in this context.

Key Results, Conclusions and Recommendations for Assessing the Coherence of the Adaptation Portfolio***Coherence with Other Donors and Development Partners***

German DC has set the objective to implement the principles of the international development effectiveness agenda. By promoting the complementarity and coherence of individual donors' development measures, the German Federal Government also aims to reduce donor fragmentation. Fragmentation refers to the concentration of parallel development measures, not or only marginally coordinated by various development actors in one country. In line with the principle of international cooperation, the study at hand assumes that German DC is particularly active in countries where comparatively few other donors are involved in adaptation finance. This study considers the overall portfolio and specifically the aspect of donor concentration. The potential complementarity of different donors in a country's field of climate change adaptation is not considered at this point in time. On the basis of multivariate regression analyses, the allocation analysis concludes that Germany is particularly active in countries where many other donors are active in the field of climate change adaptation. A higher number of other donors committing funds in the field of climate change adaptation thus increases the probability that Germany will make a commitment in the field of climate change adaptation to a country. Analysis of interaction effects shows that donors are concentrated in certain populous and strategically important recipient countries. A higher number of other donors in turn means that Germany will commit a higher level of funds. Thus the expectation that Germany will concentrate its adaptation funds on countries in which fewer other donors are active in the field of climate change adaptation cannot be confirmed. The result contradicts the expected aspiration level, and so the coherence expectation can only be partially confirmed with regard to the aspect of donor concentration. Against the background of the previous finding that the Smaller Island Developing States

benefit significantly below average from adaptation commitments, however, there is a danger that individual countries in need will be "forgotten" by international DC. This leads to the following recommendation:

Recommendation 4:

Within the framework of the "Development Policy 2030" strategy, BMZ should address the aspect of donor concentration in the field of climate change adaptation and – considering questions of donor complementarity – advocate for adequate international cooperation.

Coherence of Different Policy Fields in the Federal Republic of Germany

In addition to complementarity and coordination, the extent to which the federal ministries' work is coherent in terms of development policy is further matter to be discussed. In the context of the study at hand, this coherence could only be reviewed for BMZ and BMU international climate policy, respectively. The statistical data analysis was supplemented with information from key informants. From the point of view of coherence, too, there is no indication of any contradictions between the BMZ portfolio and the BMU portfolio, revealed in the scope of the portfolio and allocation analysis. However, the extent to which the objectives and effectiveness of the respective ministries in the field of climate change adaptation actually correspond cannot be conclusively assessed due to the lack of a common strategic framework. Seeking an answer to this question should be made the subject of future studies.