



EVALUATION OF INTERVENTIONS FOR CLIMATE CHANGE ADAPTATION

Synthesis report

Executive Summary
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IMPRINT

Authors

Dr Martin Noltze
Alexandra Köngeter
Dr Isabel Mank
Kevin Moull
Dr Mascha Rauschenbach

Responsible team leader

Dr Martin Noltze

Responsible head of department

Dr Sven Harten

Editing

Silvia Richter, mediamondi, Berlin
www.mediamondi.de

Translation

exact! GmbH, Mannheim

Layout

Birgit Wedemeyer, Bonn

Photo credits

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German Institute for
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Fritz-Schäffer-Straße 26
53113 Bonn

Phone: +49 (0)228 33 69 07-0

E-mail: info@DEval.org

www.DEval.org

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SUMMARY

Background

Climate change is one of the greatest challenges in the history of mankind. The global consequences of climate change jeopardise the preservation and development of natural and human systems and are already leading to high ecological, social and economic costs today. The poorest countries are particularly affected by the negative impacts of climate change. At the same time, there are still opportunities to strengthen sustainability and resilience for both people and the environment. When it comes to dealing with the impacts of climate change, adaptation plays a key role.

German development cooperation (DC) aims to strengthen climate resilience by adapting to climate change. The German Federal Government is financially committed to this objective, as well. Between 2011 and 2020, Germany's climate-related official development assistance (ODA) as reported to the Organisation for Economic Co-operation and Development (OECD) amounted to USD 45.4 billion, approximately a quarter of all German ODA. Of that amount, over USD 17.5 billion were committed for climate change adaptation interventions.

But to what extent did the Federal Government set relevant priorities for adaptation-related ODA? To what extent do adaptation interventions achieve their objectives? And to what extent does German DC contribute towards strengthening climate resilience in developing and emerging countries? The German Institute for Development Evaluation (DEval) sought to answer these questions in a modular evaluation of climate change adaptation interventions.

The portfolio and allocation analysis of the evaluation ("evaluation module 1") shows that German DC largely achieves its funding goals and sets relevant priorities by committing adaptation funding to countries that are vulnerable to climate change (Noltze and Rauschenbach, 2019). When it comes to the effectiveness of adaptation interventions, however, an additional module ("evaluation module 2") clearly shows that the substantial funds in the large adaptation-relevant sectors of agriculture and water as well as in coastal protection – an area of the environmental protection sector – are barely reflected in the achievement of objectives of adaptation interventions (Noltze et al., 2023). "Evaluation module 3" found a discrepancy between the objective of comprehensively addressing climate risks and the limited relevance of individual instruments (Leppert et al., 2021).

This synthesis report ("final report") compiles the findings from evaluation modules 1-3 and answers four overarching evaluation questions.

Firstly, the evaluation investigates how German DC systematically considers climate risks – in terms of mainstreaming adaptation. In doing so, it examines German DC's long-time objective for its handling of climate risks. This includes avoiding negative adaptation outcomes and impacts, increasing adaptive capacities and exploiting beneficial opportunities by integrating adaptation into the programming of the German DC portfolio (beyond adaptation interventions).

Evaluation question 1: To what extent does German DC systematically consider climate risks?

Secondly, the evaluation conducts an overarching review of the effectiveness and impact of German adaptation interventions. To this end, it examines how various types of adaptation interventions contribute towards strengthening climate resilience through their objectives of better responding to shocks, stressors and residual climate risks, increasing adaptive capacities and enhancing the enabling environment. The evaluation groups the interventions into nature-based solutions, infrastructure interventions, technological options, informational/educational interventions, institutional and regulatory framework, financial/market mechanisms and social/behavioural interventions.

Evaluation question 2: To what extent does German DC make effective and impactful contributions to climate change adaptation?

Thirdly, the evaluation examines transformative adaptation interventions. Sustainably responding to the climate crisis increasingly necessitates a transformative and just transition towards a socio-economic system that is climate-neutral, social and inclusive without leaving anyone behind. The evaluation examines whether German DC pursues the objective of transformative adaptation policy, whether it has an internationally compatible conceptual understanding of how to design transformative adaptation interventions and whether it uses appropriate interventions.

Evaluation question 3: To what extent does German DC promote transformative adaptation interventions?

Fourthly, the evaluation looks at German DC's objective of integrating the cross-cutting issue of conflict sensitivity into interventions for adaptation to climate change. Many developing and emerging countries are subject to multiple vulnerabilities, often including conflicts in addition to climate vulnerability. This gives rise to complex interactions regarding adaptation to climate change. For example, a growing body of evidence indicates that climate change exacerbates conflicts. At the same time, conflicts limit the effectiveness and impact of interventions. On the other hand, adaptation interventions have the potential to promote peace or reduce conflict, which contributes to mitigating climate-related economic losses and maintaining livelihoods.

Evaluation question 4: To what extent does German DC ensure interplay between adaptation interventions and the cross-cutting topic of conflict sensitivity?

The purpose of the evaluation is to support the future alignment and impact-oriented further development of the German DC adaptation portfolio. The conclusions and recommendations of the evaluation are aimed at the Federal Ministry for Economic Cooperation and Development (BMZ) and the Funding Programme of the International Climate Initiative (IKI), which the Federal Ministry for Economic Affairs and Climate Action (BMWK) has been implementing since 2022 in close cooperation with the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) and the Federal Foreign Office (AA). They are also aimed at the governmental implementing organisations KfW Development Bank (KfW) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

Methodology

This evaluation comprises several methodological components. A case analysis on the mainstreaming of adaptation in German DC interventions and a study on the quality of adaptation indicators in monitoring and evaluation serve as the basis for answering the evaluation question regarding the systematic consideration of climate risks. To answer the question regarding the effectiveness and impact of the German adaptation portfolio, the evaluation uses an evaluation synthesis of the findings of Leppert et al. (2021) and Noltze et al. (2023). To address the evaluation questions on transformative and conflict-sensitive adaptation interventions, the evaluation relies on desk studies and workshops. The connection of the results to the development cooperation context is supported by a portfolio analysis.

Results, conclusions and recommendations

Adaptation financing

The Federal Government's adaptation-related ODA contributes towards achieving international climate funding objectives. With annual new commitments of approximately EUR 2.15 billion from budget funds (bilateral and multilateral), Germany is one of the largest bilateral adaptation donors globally in terms of ODA reported to the OECD and makes significant financial contributions to the relevant multilateral organisations. However, German DC only partially fulfils the benchmark of providing special support for Small Island Developing States. This is evident for both the bilateral (see Noltze and Rauschenbach, 2019) and multilateral (this evaluation) segments of the German adaptation portfolio.

Consideration of climate risks

When it comes to the systematic consideration of climate risks, there is clearly a significant discrepancy between German DC's long-time objective of mainstreaming adaptation in the broader German DC portfolio and the way this is implemented in practice. On the one hand, German DC has relevant and internationally compatible safeguards and interventions. On the other hand, the case analysis regarding the adaptation mainstreaming of 23 adaptation-relevant interventions in especially climate-vulnerable contexts found barely any indication that climate risks are handled systematically in practice. Neither in the assessments nor in the design and implementation of the evaluated interventions did German DC effectively apply the requirements for avoiding negative climate impacts caused by interventions, for exploiting beneficial opportunities arising from climate change or for increasing adaptive capacities, which have been binding since 2014. The benchmark of mainstreaming adaptation is therefore barely fulfilled. In light of this assessment, the evaluation comes to the following recommendation:

Recommendation 1: GIZ and KfW should effectively mainstream adaptation in order to

- increase the effectiveness and impact of the German DC portfolio on climate resilience in the partner countries
- by 1) avoiding negative impacts, 2) better responding to residual climate risks, 3) increasing adaptive capacities and 4) exploiting beneficial opportunities.

In terms of putting “recommendation 1” into practice, the BMZ could 1) monitor mainstreaming and support the exchange of experiences between organisations, 2) introduce quality assurance in the “environmental and climate assessment” quality criterion and 3) make adaptation-relevance a default for interventions in especially climate-vulnerable contexts in keeping with the precautionary principle.

Effectiveness and impact of adaptation interventions

The results of the evaluation synthesis show that German DC uses adaptation interventions that effectively contribute towards better responding to shocks and stressors in climate-vulnerable contexts and increasing the adaptive capacities in countries that lack such capacity. Nature-based solutions and infrastructure interventions make the clearest contribution to achieving objectives and strengthening climate-resilience. Interventions combined with informational/educational interventions continue to show increased potential for outcomes and impacts. However, German DC also funds a range of interventions shown to have either no or even negative adaptation effects. The enhanced enabling environment and better handling of residual climate risks also represent objectives to which the interventions used are found to make barely any contribution, if at all. This includes informational/educational interventions and interventions to improve the institutional and regulatory framework as well as financial and market mechanisms. Conflicting and partially even negative effect and impact findings arise mostly for technological options and for social and behavioural interventions. The latter category comprises 25 percent of interventions funded by German DC. However, there are barely any robust findings for unintended (negative) outcomes and impacts and contributions causing maladaptation, in particular; accordingly, the statements are subject to a higher degree of uncertainty in comparison to the proven or unproven positive outcomes and impacts. Overall, the German adaptation interventions partially fulfil the benchmark of contributing to adaptation to climate change. In light of this assessment, the evaluation comes to the following recommendations:

Recommendation 2: The BMZ and the IKI Funding Programme should expand the funding for nature-based solutions and infrastructure interventions in order to

- help deal with shocks and stressors more effectively in particularly climate-vulnerable contexts
- and help increase adaptive capacities in countries where these capacities are low.

In terms of putting “recommendation 2” into practice, there would be additional potential in combining various interventions if they also include informational and educational interventions. Interventions with the objective of enhancing the enabling environment, in particular, could be examined using specific theories of

change and indicators to establish their effectiveness and impact. The funding could also be expanded in particular in cooperation with other donors and (multilateral) organisations.

Recommendation 3: The BMZ and the IKI Funding Programme should strengthen the evidence-based programming of the adaptation portfolio in order to

- make the German adaptation portfolio more effective
- and thus contribute to strengthening climate resilience in the partner countries.

In terms of putting “recommendation 3” into practice, the BMZ and the IKI Funding Programme could compel the implementing organisations to make adaptation interventions easier to evaluate and increase the quality of evaluation – by systematically including the vulnerability context and using adaptation-related theories of change, objectives and indicators. To supplement evidence from project evaluations, rigorous (accompanying) evaluations could be promoted, especially in “evidence-scarce” areas of the portfolio. The evaluations by the implementing organisations could also address unintended effects and the risk of maladaptation better than they have done up to now. Together with the implementing organisations, the BMZ and the IKI Funding Programme could improve the framework conditions for systematic learning – also through cross-sectional analyses.

Transformative adaptation interventions

The results of the theory-building desk studies and workshops show that German DC generally pursues a transformative climate policy. In addition, it defines transformation in line with internationally recognised standards and thus has an internationally compatible conceptual understanding at operational level. What is missing are sufficiently adaptation-specific transformation objectives and a strategic framework for transformative adaptation. The understanding of the transformation concept also differs between the individual ministries and organisations. German DC has a range of adaptation-relevant and conceptually appropriate transformative interventions which are also implemented. However, the extent to which these interventions contribute to fundamental change in practice is an open question. The benchmark of maintaining an internationally compatible understanding of transformative, appropriate adaptation interventions is therefore partially fulfilled. In light of this assessment, the evaluation comes to the following recommendation:

Recommendation 4: The BMZ and the IKI Funding Programme should create innovation spaces for transformative adaptation interventions and provide financing in order to

- refine and integrate existing approaches
- and develop new approaches.

In terms of putting “recommendation 4” into practice, GIZ and KfW could 1) develop innovative concepts, objectives and indicators, 2) design appropriate monitoring, evaluation and learning approaches as well as cross-ministry exchange formats and support knowledge management, 3) pilot transformative interventions in cooperation with academia/accompanying research, 4) help create an error-tolerant culture through more transparency and openness and 5) more consistently demonstrate principles such as partnerships for development and target group orientation.

Conflict-sensitive adaptation interventions

When it comes to ensuring interplay between adaptation interventions and the cross-cutting topic of conflict sensitivity, the results of the theory-building desk studies and workshops show that German DC above all follows a “do no harm” approach. Realising potential synergies for strengthening resilience more broadly has played a secondary role up to now. This is insufficient in light of the complex interactions between adaptation and conflict. On the one hand, adaptation interventions are suitable for preventing violent conflicts and stabilising the livelihoods of people in fragile countries, though they also carry the risk of exacerbating conflicts. On the other hand, adaptation outcomes and impacts are affected by violent conflict. The evaluation shows that their effectiveness and impact is limited in contexts of conflict. Conflict-sensitive approaches are therefore

growing more important for the design and implementation of adaptation interventions. The benchmark of German DC to design adaptation interventions in a conflict-sensitive manner has barely been fulfilled up to now. In light of this assessment, the evaluation comes to the following recommendation:

Recommendation 5: In countries with a high escalation potential and high climate risk, GIZ and KfW should design conflict-sensitive adaptation interventions in order to

- ensure adaptation outcomes and impacts in conflict contexts,
- avoid outcomes and impacts that exacerbate conflict
- and contribute to peacebuilding.

In terms of putting “recommendation 5” into practice, the BMZ could make designing conflict-sensitive adaptation interventions mandatory in countries with a high escalation potential and high climate risk. GIZ and KfW could integrate the conflict sensitivity check when considering options for adaptation interventions and integrate the climate assessment when considering options for action in peacebuilding and security interventions.

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