

Ex post evaluation Climate Insurance Fund I-IV, all developing countries

Title	Climate Insurance Fund I-IV (named InsuResilience Investment Fund since 07/2017)		
Sector and CRS code	Formal sector financial intermediaries (CRS no. 24030)		
Project number	Fund: 2013 97 777, 2014 97 502, 2014 97 536, 2016 97 572; TAF: 2013 97 793, 2014 97 510, 2014 97 544; PSF: 2013 97 801, 2014 97 528, 2014 97 551		
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)		
Recipient/Project-executing agency	InsuResilience Investment Fund, fund manager BlueOrchard Finance Ltd		
Project volume/ Financing instrument	EUR 74.82 million		
Project duration	2013–today (fund established in 2015)		
Year of report	2022	Year of random sample	2019

Objectives and project outline

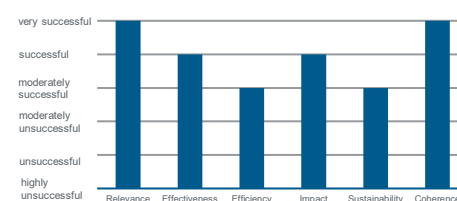
The FC project's outcome objective was to create needs-based, financially sustainable insurance solutions to decrease the vulnerability of households and companies in developing countries that are particularly affected by climate change. In addition, incentives for climate change adaptation were to be put in place. At impact level, the aim was to contribute to alleviating poverty and ensuring security of food supply. The worldwide fund was to allocate equity and debt capital to insurance and financial intermediaries. The project also included a Technical Assistance Facility (TAF) and a Premium Support Facility (PSF), which provided temporary premium subsidies for policyholders.

Key findings

The InsuResilience Investment Fund (IIF) is divided into an equity fund and a debt capital fund and makes a major contribution to climate change adaptation. The fund was rated "successful" for the following reasons:

- Claims due to extreme weather events are increasing and primarily affect low-development countries (high relevance). In addition, the project pursues a coordinated global approach between various public and private parties (high coherence).
- The fund was unable to reach the target number of policyholders within the scheduled timeframe, as the introduction and marketing of insurance products took longer than expected (effectiveness).
- IIF operates with comparably high financial costs (efficiency) and the fund has not yet operated to reliably cover costs (sustainability).
- While important indicators are not achieved, the impact is smaller than anticipated. However, the fund plays a particularly important pioneering role worldwide through its innovative approach (overarching developmental impact).

Overall rating:
successful



Conclusions

- Climate insurance projects must be regarded as "market-building initiatives" that require a great deal of know-how and time
- The TAF is seen by insurance providers as a major strength of the fund, providing important technical assistance
- The PSF has a central role to play, making insurance products affordable for policyholders
- One of the most important means of the project is to create visibility. This often happens after a claim through word-of-mouth and the visibility of the disbursements

Rating according to DAC criteria

Overall rating: 2

Ratings:

Relevance	1
Coherence	1
Effectiveness	2
Efficiency	3
Overarching developmental impact	2
Sustainability	3

Breakdown of total costs

This evaluation is a collective evaluation of four FC modules, each of which is awarded the same rating because it was neither possible nor sensible to separate the modules. The four modules are “Climate Insurance Fund I-IV” (Modules 1–3 consist of the accompanying measure of a Technical Facility (TAF) and a Premium Subsidy Facility (PSF) in addition to the fund, each of which is listed separately in the tables below. Fund BMZ numbers: 2013 97 777, 2014 97 502, 2014 97 536, 2016 97 572; TAF: 2013 97 793, 2014 97 510, 2014 97 544; PSF: 2013 97 801, 2014 97 528, 2014 97 551.¹

Fund	2013 97 777		2014 97 502		2014 97 536		2016 97 572	
in EUR million	(planned)	(actual)	(planned)	(actual)	(planned)	(actual)	(planned)	(actual)
Investment costs	14.58	14.58	31.50	31.50	4.00	4.00	7.23	7.23
Counterpart contribution	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financing	14.58	14.58	31.50	31.50	4.00	4.00	7.23	7.23
Of which budget funds (BMZ)	14.58	14.58	31.50	31.50	4.00	4.00	7.23	7.23

TAF	2013 97 793		2014 97 510		2014 97 544	
in EUR million	(planned)	(actual)	(planned)	(actual)	(planned)	(actual)
Investment costs	2.75	2.75	7.20	7.20	1.30	1.30
Counterpart contribution	0.00	0.00	0.00	0.00	0.00	0.00
Financing	2.75	2.75	7.20	7.20	1.30	1.30
Of which budget funds (BMZ)	2.75	2.75	7.20	7.20	1.30	1.30

PSF	2013 97 801		2014 97 528		2014 97 551	
in EUR million	(planned)	(actual)	(planned)	(actual)	(planned)	(actual)
Investment costs	1.36	1.36	4.20	4.20	0.70	0.70
Counterpart contribution	0.00	0.00	0.00	0.00	0.00	0.00
Financing	1.36	1.36	4.20	4.20	0.70	0.70
Of which budget funds (BMZ)	1.36	1.36	4.20	4.20	0.70	0.70

¹ The PSF is included in the following evaluation. However, it should be noted that the Premium Subsidy Facility only became operational in 2019, and the evaluation period is therefore rather short for a final appraisal.

General conditions and classification of the project

During the United Nations (UN) Climate Conference in Bonn in 2017, the InsuResilience Global Partnership for Climate and Disaster Risk Finance and Insurance Solutions (hereinafter “Partnership”) was initiated by the G7 Partners.² Parts of this partnership consists of various instruments or funds. The “Climate Insurance Fund I-IV” projects evaluated here include the establishment of the InsuResilience Investment Fund (IIF, hereinafter referred to as the “Fund”) by KfW in 2015.³ The fund was divided into two sub-funds in mid-2017: A structured equity fund (capitalisation of around EUR 80 million, of which around 60% private capital) and a structured debt capital fund (capitalisation of around EUR 150 million, of which around 79% private capital).⁴ Different risk classes for investors can make it more attractive to private investors, while any losses are initially absorbed by the state shareholders. In addition, the project includes a TAF that supports project implementation and assumes an educational role, as well as a PSF that temporarily (partially) subsidises the premiums for end customers (hereinafter referred to as “Policyholder”). The BMZ made a total of EUR 57.31 million in trust funds available in four phases; additional grants amounting to EUR 11.25 million for the TAF and EUR 6.26 million for the PSF. The fund invests in microfinance, insurance and technology companies (hereinafter “Insurance Providers”) that help mitigate climate-related risks by providing climate risk insurance to policyholders.

Relevance

Global climate change and its impacts pose major challenges. One of these challenges is the increase in the frequency and severity of extreme weather events, which particularly affects populations in developing countries, as such events are particularly frequent and severe there (e.g. floods on island states or more severe and more frequent droughts leading to crop failures).⁵ They also suffer major damage in relation to their economic performance, which has a considerable adverse effect on their income situation and which they have difficulty absorbing due to a lack of financial reserves. Households and companies in developing countries find it difficult to access insurance solutions, even though they are suitable for financial protection.⁶ The reasons for this are the lack of adequate products on the local insurance market, comparatively high insurance premiums and a lack of knowledge among many potential policyholders about the functionality and benefits of insurance.

The project is based on the following impact chain: The climate insurance cover protects policyholders against total loss and allows them to cope with severe weather more quickly economically. In the short term, this results in a reduction in asset losses and positive growth effects in the medium and long term. Diversifying risks across different budgets, companies, countries and regions creates a solid basis for insurance providers. Adaptation to climate change takes place via two channels: firstly through the premium itself and, secondly, through premium reductions for adaptation measures. This development eases the burden on the state as an insurance provider of the last resort and has positive effects on the debt situation of the respective country. The impact chain underlying the project is fundamentally coherent.

The core problem is also relevant from today’s perspective: The risks of severe weather events as a result of climate change continue to rise. Losses due to extreme weather events have increased significantly since 1970 and are now at a volume of USD 60 billion.⁷ It can be empirically proven that insurance solutions deliver tangible results in terms of climate change adaptation, especially in developing countries.⁸

² <https://www.insuresilience.org/>

³ <https://www.insuresilienceinvestment.fund/>

⁴ Status at Final Close 2020. In the present report, we generally refer to the term “fund” in simplified terms, without making the differentiation according to sub-funds or the associated facilities (unless this is explicitly noted).

⁵ If we look at the most recent data, for example, the countries of Mozambique, Zimbabwe, Bahamas, Puerto Rico, Myanmar and Haiti are in first place in terms of vulnerability due to climate change. Source: The Global Climate Risk Index 2021, <https://reliefweb.int/report/world/global-climate-risk-index-2021>. <https://www.woodwellclimate.org/climate-change-food-security-crop-failures/>; <https://oecd.org/env/cc/37178873.pdf>

⁶ Numerous studies investigate, for example, the effect of insurance solutions on poverty or adaptation to climate change. Linnerooth-Bayer, Warner, Bals, Höpfe, Burton, Loster, Haas. 2009. Insurance, Developing Countries and Climate Change.

⁷ Status in 2020. Source: Swiss Re Institut.

⁸ https://www.unepfi.org/fileadmin/documents/insurance_climatechange_statement.pdf

The establishment of the TAF and the PSF is geared towards sector deficits and the needs of the target group (lack of insurance knowledge and high insurance premiums). The PSF in particular is likely to be a unique selling point and will allow insurance solutions to be (temporarily) offered at lower premiums for policyholders, thereby establishing a local insurance market.

The project is also in line with other projects supported by the BMZ. For example, it promotes the reduction of greenhouse gases and the expansion of renewable energies.⁹ In addition, the project fits into the national norms and standards to which DC is committed (such as environmental standards and climate change mitigation). At the local level, challenges arising from climate change are also often on the agenda of the respective countries,¹⁰ and many of these countries also have a designated climate strategy.¹¹

The core problem addressed by the project can be assessed as very relevant from both the perspective at the time and from today's perspective. While claims due to extreme weather events are increasing and developing countries are particularly at risk, the population in the regions is poorly covered by insurance.¹² In addition, the approach to dealing with the problem is comprehensible and addresses a problem that receives little international attention.

Relevance is rated as very successful.

Relevance rating: 1

Coherence

At the time of the fund's establishment in 2015 (and still today), we are not aware of any initiative that promotes private climate insurance in developing countries with a similar approach or to the same extent. Other initiatives either aim to mitigate climate change (climate mitigation) or take a different, public approach, such as, the Munich Climate Insurance Initiative (MCII), which serves as a kind of forum (for regulators, non-governmental organisations and insurance companies) and develops solutions together. According to an estimate by the United Nations Environment Programme (UNEP), only 5% goes to climate change adaptation projects, while 95% goes to climate change mitigation.

The establishment of the InsuResilience Global Partnership brought about the coordination and organisation of 118 parties worldwide (governments, international development organisations, private enterprises, non-governmental organisations, think tanks).¹³ The initiative promotes research, innovation and technological support to enable timely and more reliable responses to disasters and to better prepare for such risks. The fund plays a central role within the initiative and closes a significant gap by having a direct influence on the private sector offer of climate insurance through its activities and thus on access for policyholders. External coherence can be assessed as high, as the project follows a coordinated approach as part of this initiative.

With the aim of increasing the resilience of vulnerable sections of the population to the impacts of climate change and securing their food supply, the project's approach is firmly committed to this overarching focus of German DC. This results in good internal coherence, especially since there are no overlaps or duplications of other DC approaches.

The cooperation between the TAF and the PSF is also coherent and has an additive effect on the fund, since a lasting expansion of the insurance offer also requires the education of policyholders. No crowding-out effects from the PSF or other negative side effects could be identified. In summary, we note that the

⁹ <https://www.bmz.de/de/entwicklungspolitik/klimawandel-und-entwicklung>

¹⁰ https://www.mea.gov.in/articles-in-indian-media.htm?dtl/32018/Indias_Climate_Change_Policy_Towards_a_Better_Future#:~:text=The%20government%20may%20raise%20India's,power%20in%20its%20energy%20mix;https://www.carbon-brief.org/paris-2015-tracking-country-climate-pledges

¹¹ e.g. Nigeria: https://climatechange.gov.ng/wp-content/uploads/2021/08/NCCP_NIGERIA_REVISIED_2-JUNE-2021.pdf; or Uganda: <https://www.mwe.go.ug/sites/default/files/library/National%20Climate%20Change%20Policy%20April%202015%20final.pdf>

¹² https://i.unu.edu/media/ehs.unu.edu/news/11862/RZ_G7_MCCI_DinA4_6Seiter151201.pdf

¹³ In addition to various governments from Germany, the USA and Japan, members include development organisations such as the World Bank Group, OECD, UN and private enterprises such as Allianz, AXA, MunichRE and non-governmental organisations such as Care, Red Cross, Germanwatch, as well as think tanks such as CGIAR, PIK and WRI.

project follows a coordinated approach in cooperation with many other parties. This is the ideal case, as it means that important stakeholders are in continuous discourse and work closely together.

Coherence is rated as very successful.

Coherence rating: 1

Effectiveness

The project's module objective was to improve access to and use of climate protection insurance and to reduce vulnerability to climate change. The target achievement at outcome level is summarised in the table below:

Indicator	Baseline and target value PA ¹⁴	Actual value EPE 2022 ¹⁵
(1) Number of additional beneficiaries ¹⁶ among investment recipients ¹⁷ since the beginning of 2015	Baseline value: 0 Target value: 104 million with a fund volume of USD 250 million	Actual value: 39.2 million (fund volume USD 230 million)
(2) Estimated number of additional beneficiaries in 2025 based on the current portfolio of supported companies ¹⁸	Baseline value: 0 Target value: 90–145 million with a fund volume of around USD 230 million	Actual value: 70–110 million ¹⁹ (expected, assuming constant growth, fund volume USD 230 million)
(3) Number of investment recipients who provide climate insurance after promotion	Baseline value: 0 Target value: All	Actual value: 18 of 26 (69%)
(4) Total number of customers of the investment recipients ²⁰ and of which o % in rural areas o % women	Baseline value: 0 Target value: Increase	Actual value: 8.7 million o 97% in rural areas o 64% women
(5) Lower vulnerability of the policyholders to extreme weather risks in comparison with control groups (at the latest upon final report)	Baseline value: N/A Target value: Lower vulnerability	Actual value: Comparison with Outreach Report (see below in the text)
(6) Level of investment (share of the fund volume translated into appropriate investments)	Baseline value: 0 Target value: Is followed up on the basis of the business plan	Actual value: ²¹ Capital: 78%, Debt capital: 73%

¹⁴ The objectives were adjusted after the project appraisal. The baseline and target values of the most recent 2021 reports are used for this report.

¹⁵ The actual values are based on the data from the end of 2021, unless otherwise specifically noted.

¹⁶ Beneficiaries, hereinafter referred to as policyholders, are defined as follows: Number of people who have taken out an insurance policy multiplied by the number of people in a typical household. The multiplier of a typical household depends on the respective investment country.

¹⁷ Investment recipients are enterprises in which the fund invests. In the report, these are hereinafter referred to as insurance providers.

¹⁸ Enterprises, investment recipients and insurance providers can be understood as synonyms in this context. In turn, the number of additional estimated beneficiaries is the number of policyholders multiplied by the typical household size.

¹⁹ The relatively large margin of the actual value is due to the fact it is an estimated value.

²⁰ The number of customers here refers to climate insurance customers.

²¹ This is the capital called by the fund from investors since its inception and not the capital invested at present. It also includes capital repaid to the fund by investment recipients.

(7) Number of advised investment recipients	Baseline value: 0 Target value: >50%	Actual value: 50% (relative to the number of insurance providers)
(8) Number of training measures carried out	Baseline value: 0 Target value: Needs-based, determined on the basis of the training requirements identified	Actual value: 60
(9) Number of subsidised insurance policies	Baseline value: 0 Target value: Is determined at the time of the application of the premium subsidies	Actual value: 4,485,141 (5 premium finance projects ²²)

Note on indicator (1): Indicator 1 is one of the most important indicators from the perspective of the ex post evaluator, as it maps the direct relationship between the fund volume and policyholders. However, the target value was clearly missed (by a factor of 2.7). The reasons for this are as follows:

1. The introduction (project planning and product design) of insurance products takes more time than originally anticipated, as these often have to be tested with the help of pilot projects and are subject to strict regulatory requirements (delays are often 18 months to two years). As the fund also invests through microfinance institutions and banks as part of the debt capital fund, this also delays implementation.
2. It takes more time than anticipated to market insurance products or sell them to the policyholders. This often required a period of two to four years.
3. Winning over insurance providers is more difficult than expected. Investments must always comply with the mandate of the fund and often the core business of potential insurance providers does not include climate insurance.
4. The Covid-19 pandemic slowed down product development since 2020. Due to the restrictions on business activity, significantly more time was also required for the evaluation of the insurance providers. Moreover, due to the increased uncertainty, it was difficult to initiate new projects.
5. Change of measurement method: Initially, six people were budgeted per household (for all countries) and subsequently this was more precisely calculated on the basis of the national household sizes (of the respective investment countries). This adjustment resulted in lower values.

Note on indicator (2): This indicator is an estimate of beneficiaries, which is to be achieved in 2025, provided that a fund portfolio of USD 230 million has been set up by then. It is difficult to assess an estimate during an evaluation. The estimate appears ambitious, but is just about achievable in quantitative terms, albeit with a delay: Taking into account the previous trend, the number of investment recipients rose from 10 (2017) to 15 (2018) to 17 (2019) to 20 (2020) to 26 (2021). This results in an average growth rate of 28% for investment recipients between 2017 and 2021. As of 2021, the ratio of investment recipients to final beneficiaries is: 1 to 1.5 million. If this trend is continued, the number of final beneficiaries would reach 90 million (lower range of the target value) in around 2025, and the value of 145 million (upper range of the target value) in 2027.

Note on indicator (3): As of December 2021 reporting, 18 of the 26 insurance providers (69%) offer climate insurance after investment by the fund. The target was 100%. In other words, provisionally there have been cases where insurance providers do not provide climate insurance after an investment by the fund. The main reasons why an insurance provider does not provide climate insurance are those listed under indicator (1). For example, a climate insurance product may still be in the launch phase (an insurance provider is not included in the list until the product is fully on the market). However, there have also

²² Projects are always used for premium financing. In other words, the subsidy is not rolled out per policy, but for an entire project (insurance product).

been cases with some resolution loans or participant companies that have problems with their capacity, liquidity or profitability, for which the development of their insurance product takes more time than anticipated or was stopped. Contracts between the fund and insurance providers include hedging clauses so that the fund may recover the investments. In this regard, it should also be noted that the above-mentioned cases are temporary. Over time, it can be observed that these insurance providers generally offer climate insurance, so the introduction is more of a question of time.

Note on indicators (4), (6), (8) and (9): These indicators are hard to assess and not suitable for measuring success. With a baseline value of zero, the indicators do not have a benchmark and a mere increase by a value greater than zero says little. With no quantitative target values for the indicators, these have little informative value, meaning that target achievement cannot be assessed.

Note on indicator (9): With regard to the PSF, it can be added that 95% (2019), 91% (2020) and 88% (2021) of the PSF funds budgeted per BMZ number are allocated. Although the PSF has only been operating since 2019 and all projects are still ongoing, the premium subsidies appear to be needed. The number of subsidised insurance policies appears to have little informative value in itself. It is more relevant whether the subsidies result in policyholders renewing insurance policies in the long-term; therefore, the renewal rate of these policies should also be measured. This is not yet possible at this time. However, it is possible to share initial experiences: The fund follows a model of decreasing premium support and costs for the policyholder gradually increase over time. In the second season, it was observed that an even greater number of customers than forecast made the decision to purchase the product. This is explained by the fact that an adverse event had occurred in the first season and some customers had received insurance payments. Therefore, these experiences (and word-of-mouth) sparked a strong interest to buy the product again next season – albeit this time at a higher price. However, it should be noted that with a high proportion of funding (approx. 80%) the total price to the customer was still quite low, so a lower range of price sensitivity can be assumed.

Note on indicator 5 (the appraisal is based on the status stated in the Outreach Report)²³: First of all, it can be stated that direct payments are made through the insurance policies that are supported by the fund's investments and created in cooperation with the fund. In the event of an extreme weather disaster (mainly droughts), these provide financial protection for policyholders and thus reduce their vulnerability. For example, insurance providers have reported that the climate insurance product they offer helps to maintain the solvency of their policyholders. In one case, for example, there were 3,521 policyholders who received payments due to their insurance policies for damage caused by heavy rainfall, storms, etc. If we analyse the relationship between notices of loss and disbursements, we see the majority of these are paid out. There are concrete studies that demonstrate the effectiveness of the fund.²⁴ The intended comparison with a control group is still pending

Note on indicator (7): Part of the fund is the TAF, which takes on an educational, training and support role for both insurance providers and policyholders. Since developing countries often lack the product-specific expertise on climate insurance among insurance providers, an indicator that includes the training measures makes sense. Insurance providers consider the TAF to be one of the fund's major strengths (according to the fund manager).²⁵ For example, continued advertising for the educational workshops has led to a considerable number of workshop enquiries.

The number of insurance providers in the fund has increased since 2015 from 1 to 26, and in this time the fund has reached 39 million policyholders. In 2021, more than 10,000 policyholders were able to benefit from compensation payments. The fund's 26 insurance providers now offer climate insurance via their branches in 25 countries.²⁶

²³ <https://www.insuresilienceinvestment.fund/wp-content/uploads/2020/12/2020-Protecting-low-income-communities-through-climate-insurance-by-IIF.pdf>

²⁴ Cf. Outreach Report (<https://www.insuresilienceinvestment.fund/wp-content/uploads/2020/12/2020-Protecting-low-income-communities-through-climate-insurance-by-IIF.pdf>)

²⁵ <https://www.insuresilienceinvestment.fund/wp-content/uploads/2020/12/2020-Protecting-low-income-communities-through-climate-insurance-by-IIF.pdf>

²⁶ Figure according to IIF Outreach Report 2020.

From the perspective of the appraisal, the additional impact of the fund is primarily due to the TAF offer and the premium subsidy, as this effectively addressed the key challenges in the market launch of climate insurance – in particular the lack of expertise and the cost of insurance premiums.

In summary, it would have been more appropriate to limit the number of indicators overall, but to set clear quantifiable and verifiable targets for them. This can simplify the focus and raise the level of commitment. The majority of indicators were achieved. However, the objectives of four of the seven indicators achieved are not clearly defined and only allow a limited evaluation. One of the most important objectives, according to the evaluator (indicator 1), was also clearly missed. In principle, it can be seen that the fund fulfils its market formation task, but that this takes longer than originally intended. The project involves a large proportion of training courses and requires more time to demonstrate the beneficial effect of insurance to policyholders. Although product design and marketing are a long process, it is already evident that fund participants' offers are entering a scaling phase in the medium term and policyholders can be reached more and more effectively. However, this effect, as well as the results of the PSF, may still take time to reach a definitive conclusion.

Overall, it can therefore be stated that the results are below the originally defined target values, but the results are clearly seen as positive.

Effectiveness is rated as successful.

Effectiveness rating: 2

Efficiency

Time efficiency: The portfolio is being built up more slowly than expected and the number of final beneficiaries has also remained below the target values in the targeted period. After the fund was established, it quickly became clear that the introduction of climate insurance is an innovative “market-building task” that requires a long time. This suggests that such projects require longer impact periods.

Allocation efficiency: The impact per unit invested is rather difficult to measure due to the complex set-up, as on the one hand investments are made via two funds (equity and debt capital) and on the other hand policyholders cannot be translated one-to-one by the insurance providers. Currently, each insurance provider reaches around 1.5 million (climate) policyholders²⁷. There is an upwards trend in the ratio, which can probably be attributed to scaling. Once a product is established on the market and has proven its worth, it is obvious that demand tends to increase. The ratio between policyholders and insurance providers (or investment recipients) is significantly higher in the equity fund. The reason for this is that investments in the equity fund can be scaled quickly. In the debt capital fund, work is carried out at the micro level and the introduction of insurance products takes a long time and is therefore more time-consuming.

Production efficiency: The fund's total expense ratio was 2.77% (2017), 4.18% (2018), 4.60% (2019), 9.28% (2020)²⁸ and 6.63% (2021). This is a consistently high total expense ratio in comparison with other impact funds.²⁹ The most significant are the costs for the management or performance fees, which were around 5.5% in 2021, for example.³⁰ Therefore, the production efficiency (at least in comparison with other FC funds) appears to be rather low. Moreover, although the fund achieved a positive annual result in most years, overall it is still in the loss zone. These losses are borne by the first loss fund investors.

²⁷ The number of policyholders is calculated as follows: The total number of policyholders (approx. 39 million) divided by the number of insurance providers (26). To obtain the number of policies, this number is divided by the household multiplier, which depends on the respective investment country.

²⁸ The particularly high figure for 2020 is due to the fact that two further investors were added at the final closing and, according to the fund prospectus, they had to pay the fund manager an additional management fee of EUR 2 million.

²⁹ According to the “2019 SYMBIOTICS MIV SURVEY”, the average total expense ratio in 2017 was around 2.9% and in 2018 around 2.4% ([symbioticsgroup.com/wp-content/uploads/2020/02/symbiotics-symbiotics-2019-miv-survey.pdf](https://www.symbioticsgroup.com/wp-content/uploads/2020/02/symbiotics-symbiotics-2019-miv-survey.pdf)). However, it must be noted that performance fees are not included in the survey benchmark and that impact funds exhibit a very broad field (in terms of objective, sector, region, market, asset class, fund structure, etc.).

³⁰ Calculated using the fund manager's annual reports and data as: Investment Management Fees / Portfolio (NAV). In other words: USD 4,508,612 / USD 81,082,795

On the other hand, however, it must be noted that the fund achieved a positive annual result in 2017, 2018, 2019 and 2021; for example in 2021, around USD 1.2 million.³¹

It is too early to conclude how many of the insurance policies supported by the PSF will be renewed afterwards (without PSF assistance) (see Effectiveness). Additionally, it is not yet possible to state to what extent policy growth is progressing and the climate insurance product can be offered in a diversified fashion in different developing countries. Trend monitoring allows us to say that solid growth can be achieved in the long term. On average, 75% of insurance policies are renewed. According to the fund manager, it is very important for renewal that the relationship and communication between insurance providers and policyholders is well managed. In addition, it is beneficial if payments are made in the event of damage in a region and this information is shared between residents, as the concept of insurance and its benefits are new for a large part of the population.

Around half (49%) of the fund's debt exposure was in local currency, so the currency risk in these cases was with the fund, but the fund hedged these risks with corresponding hedging transactions.

In conclusion, the initial phase of the fund was slow and portfolio construction and the acquisition of insurance providers took more time than planned. Furthermore, external influences such as the coronavirus pandemic magnified the challenges mentioned. The fund also operates with high costs in comparison with other impact funds. However, it can be assumed that there will be a scaling effect in the long term. Taking into account the increases in various key figures up to 2021, such scaling effects can be clearly seen.³² Overall, the selected fund structure is considered suitable.

Based on time efficiency, allocation efficiency and production efficiency, in summary the efficiency is assessed as moderately successful. The fund does operate at comparatively high costs and it takes more time to successfully introduce insurance products. However, this is understandable in such a project and this market formation appears necessary to serve the policyholders effectively.

Efficiency rating: 3

Overarching developmental impact

The objective at impact level was to contribute to alleviating poverty and to ensuring security of food supply. For example, if data on the security of food supply is drawn from the areas in which the fund invests, the trend towards food security is increasing (e.g. the "average dietary energy supply adequacy").³³ Due to the increasing number of policyholders and the high ratio between the number of reported claims and disbursements, it can be assumed that the fund will contribute in part to this development.

This trend (number of policies) is also increasing: The insurance providers send quarterly reports that show the number of policies they broker and the number of policyholders. A steady increase in the number of insurance policies taken out is observed. As an example, one insurance provider showed an increase in insurance policies by 1.6 times and another by 1.2 times in comparison with 2018. The majority of insurance policies are crop failure insurance, which insures the harvest in the event of damage. Insurance providers told the fund that the climate insurance product they offer helps maintain the solvency of their policyholders.

The project also has a specific role to play, as there are almost no other similar initiatives. As the only programme under the G7 InsuResilience Global Partnership that both raises private capital and invests in the private sector, the fund is strategically important in the market to enhance resilience to climate-related events through insurance. In this way, the fund is positioned on the market as a complement to the efforts within the framework of climate change adaptation measures. The fund does this by establishing a structure that provides for private lending, equity investments and capacity building projects. This meant that a

³¹ Calculated using the fund manager's annual reports and data as: Operating Profit / Portfolio (NAV). In other words: USD 4,248,384 / USD 81,082,795. However, the equity fund does not cover costs and is offset by the debt capital fund (see also the Sustainability section).

³² For example, policies have more than doubled from 2020 to 2021.

³³ Examples are Mongolia (<https://data.humdata.org/dataset/faostat-food-security-indicators-for-mongolia>), Tajikistan (https://data.humdata.org/dataset/faostat-food-security-indicators-for-tajikistan?force_layout=desktop) and Myanmar (<https://data.humdata.org/dataset/faostat-food-security-indicators-for-myanmar>).

"moving-the-needle"³⁴ effect could also be achieved to a limited extent. The share of private capital was 48% in the debt capital sub-fund and 32% in the equity sub-fund.

The TAF and the PSF also have a noticeable effect. This support can thus be used to realise projects that would otherwise not have been feasible. For example, the TAF and PSF are supporting a Nigerian insurance provider, which has since also diversified into the agricultural insurance market. The insurance provider has also introduced a weather index insurance product³⁵ following a pilot project, for example, with the support of the fund.

However, as already mentioned, the project is no longer within the time schedule with regard to its impact objectives. No quantifiable targets were defined for the impact objective during the project appraisal because it was implicitly assumed that, if the outcome objectives were achieved, the impact objective would also be achieved. This is also logically correct and justified in retrospect. Since the outcome objectives have so far been significantly missed in some cases, particularly with regard to the number of beneficiaries, the contribution to the impact objective is also below expectations, or the desired impact will only be achieved at a later date through scaling. However, this is primarily attributed to the innovative character of the project, which requires correspondingly longer impact periods. It has become apparent that word-of-mouth and disbursements lead to an enormous increase in the confidence of end customers in the event of damage and send a visual signal that such insurance policies work and that disbursements are actually being paid. We therefore have to wait even longer with regard to the outcome objective.

No unwanted effects from the measures were found. In summary, the overarching developmental impact is rated as successful.

Overarching developmental impact rating: 2

Sustainability

An analysis of the renewal rates of policies reveals an average renewal rate of 75%. According to the fund manager, it is very important for renewal that the relationship and communication with the policyholder on the part of the insurance provider is well managed. In addition, it is beneficial if payments are made in the event of damage in a region and this information is shared among residents, as many end customers are not familiar with the concept of insurance and its benefits. It is also important to assess the impact of the premium reduction of the PSF. If premium reductions are used, there is a risk that the insurance policies will be too costly for end consumers or too unattractive after the end of the temporary subsidy phase. No estimate of renewal rates can be made at this stage as the PSF has only been operating since 2019 and all projects are still ongoing. However, based on current estimates and experience, a sustained effect of the PSF is anticipated (see Effectiveness section). Due to the visibility of disbursements and the spread of insurance products, it can be assumed that the fund will have a lasting effect. It is also apparent that the long introduction phases of the insurance products mean that they are carefully structured and also remain on the market.

The costs of the fund are borne from the income of the two sub-funds. The equity sub-fund pays running costs from the inflows of capital from investors, which are to be subsequently reimbursed through the sale proceeds of the participations. Overall, the fund achieved a positive annual result in 2017, 2018, 2019 and 2021. However, the equity sub-fund suffered a loss in 2018 and 2019 and the fund was only able to cover costs thanks to the positive contribution of the debt capital sub-fund. Furthermore, the debt capital sub-fund had to accept high risk provisioning expenses in 2020 (USD 4.3 million more than the previous year) and hedging losses (USD 2.5 million more than in the previous year) after two years that covered all costs. As a result, the debt capital sub-fund achieved an annual loss of USD 3.45 million in 2020 and the entire fund an annual loss of almost USD 9.5 million. As is customary for equity funds, the equity sub-fund is consistently in deficit, as the costs are to be paid out of capital and only offset by subsequent sales proceeds. In the medium term, the fund seems to be financially viable. A positive development is particularly

³⁴ The term "moving-the-needle" effect is used when a project makes it possible to make a noticeable change, to change or modify something in such a way that the impact of the action is measurable. Most often, moving the needle is used in a favourable sense, to mean making progress towards a goal.

³⁵ Weather index cover makes it possible to cope with or hedge weather risks. Weather index policies offer parametric cover that is disbursed when a weather event reaches a certain threshold.

evident in the most recent fiscal year 2021, with the overall fund achieving an annual profit of USD 1.2 million (the equity capital sub-fund contributed around USD 1.1 million and the debt capital sub-fund around USD 0.1 million).³⁶

The investment period of the equity sub-fund is set at 10 years, with a two-time possibility of extending the term by one year each time. The FC sub-fund may grant loans for the full 12-year term, provided that their repayment is within this 12-year period.

The premium subsidies have a time limit of five years per project. The aim is for the projects to continue afterwards without the need for subsidies. As noted above, the effect cannot yet be judged in the long term. However, it is plausible that policy renewals can also be conceivable without subsidies, especially if insurance payments in the context of claims have previously sent a signal in the region. Training by the TAF is also capable of generating a long-term positive effect on awareness and knowledge of the insurance market. The extent to which insurance companies can provide their policies in a profitable manner after the market launch phase has ended will be demonstrated in particular after the premium subsidies have expired.

Despite the loss in 2020, which can probably also be attributed to the extraordinary situation (coronavirus), the fund has so far only been able to operate at levels close to covering costs. However, the equity sub-fund has not yet been consistently in the profitable range of the “J curve” since its establishment and, as is customary for equity funds in the first few years, its profitability can only be measured reliably after the investments have been exited. It is therefore hard to assess the profitability and sustainability of the equity sub-fund. Based on current estimates, the return (before management fees) is within a range that is usual for equity funds. Furthermore, the sustainability of the premium subsidy cannot yet be conclusively assessed.

Sustainability is rated as moderately successful.

Sustainability rating: 3

³⁶ Source: Annual Report 2021.

Notes on the methods used to evaluate project success (project rating)

Projects are evaluated on a six-point scale, the criteria being **relevance, coherence, effectiveness, efficiency, overarching developmental impact** and **sustainability**. The ratings are also used to arrive at a **final assessment** of a project's overall developmental efficacy. The scale is as follows:

Level 1	Very good result that clearly exceeds expectations
Level 2	Good result, fully in line with expectations and without any significant shortcomings
Level 3	Satisfactory result – project falls short of expectations but the positive results dominate
Level 4	Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
Level 5	Clearly inadequate result – despite some positive partial results, the negative results clearly dominate
Level 6	The project has no impact or the situation has actually deteriorated

Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

The **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a "successful" project while rating levels 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (level 3).