Ex post evaluation – India

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Sector: Sustainable economic development (CRS code: 2403000)
Project: SIDBI innovation financing in India, BMZ no.: 2010 65 390 (low-interest loans)/ 2010 66 802* (IDA)/ 2010 70 392 (complementary measure)
Implementing agency: Small Industries Development Bank of India (SIDBI)

Ex post evaluation report: 2020

All figures in EUR million	Project (Planned)	Project (Actual)	CM (Planned)	CM (Actual)
Investment costs (total)	53.00	33.70	1.00	0.00
Counterpart contribution	0.00	0.00	0.00	0.00
Funding	53.00	33.70	1.00	1.00
of which BMZ budget funds	53.00	33.70	1.00	1.00

*) Random sample 2019

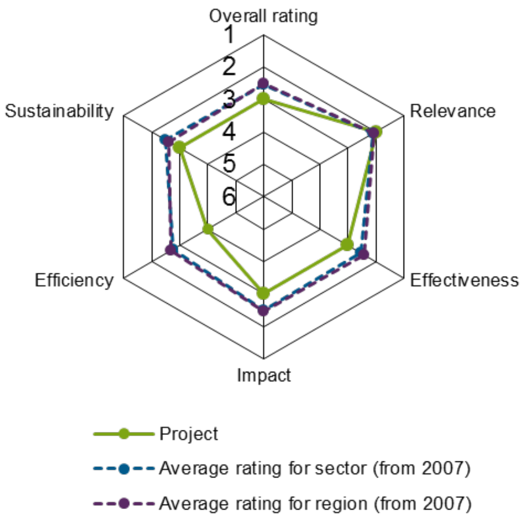
Summary: The project provided loan and risk financing in local currency to innovative start-ups and SMEs. The contract was awarded via the Small Industries Development Bank of India (SIDBI) and a financial intermediary (direct business and apex function). The complementary measure supported SIDBI in developing the project, including training measures for SIDBI staff in financing clean-tech investments, marketing and PR activities.

Objectives: The modular objectives (outcome) of the FC project were to increase market-oriented research and development activities of start-ups and SMEs in the key areas of climate, environmental and resource protection and, as a result, to introduce innovative climate and environmentally friendly products, processes and services to the Indian market. In addition, the project-executing agency was tasked with creating a range of sustainable financing products that are specifically tailored to the needs of and used by innovative SMEs in the area of environmental technologies. This was intended to make a contribution to environmentally sustainable economic growth in India and thus to global climate and environmental protection and the development of the financial system (impact).

Target group: Founders as well as innovative and growth-oriented small and medium-sized enterprises (SMEs) that provide development services in the areas of energy as well as environmental and resource protection within their own company and adapt products, processes and services to the Indian market and/or introduce them to the market.

Overall rating: 3

Rationale: The introduction of a completely new financial product for innovative entrepreneurs has proven to be a suitable approach from today's perspective. Despite strong demand, only a few banks offer products of this kind. Following the successful implementation of the project in the first two years, external factors led to part of the funding line being cut. A programme promoted at the same time by the Indian government, which served the same target group with the same intention and was more attractive from the point of view of SIDBI and ultimate borrowers, resulted in a reduction of the commitment.



Highlights: The programme evaluated was the first innovative financing project in India. SIDBI gained valuable experience during the programme implementation and was consequently able to implement new programmes in the same area independently of FC. The financing of end customers by SIDBI served as a catalyst for additional financing and investment by other capital providers.

Rating according to DAC criteria

Overall rating: 3

Ratings:

Relevance	2
Effectiveness	3
Efficiency	4
Impact	3
Sustainability	3

Relevance

From today's perspective, the approach pursued in 2012 to introduce a new financial product to finance innovation also seems plausible. Until that time, a product tailored to the needs of innovative SMEs had not been offered in India.

During the run-up to the project, the market for climate and environmental technologies in India was still in its infancy and most of the SMEs in this sector had been present in the market for less than 5 years

The framework conditions at the time of the project appraisal were problematic for these SMEs. The rather low importance of SME financing by banks (less than 10% of the total loan volume of the banks at the time of the project appraisal) was due to the inadequate credit information systems, limited sector knowledge and the lack of good evaluation and risk management instruments of the Indian banks. Banks have offered and will continue to offer primarily short- and medium-term loans with variable interest rates, which are not an optimal financing instrument, especially for growing companies. In addition to the limited range of products, the generally high requirements for loan collateralisation have a negative impact, as these companies invest mainly in the development of new products, research and patents, and cannot provide collateral that can be used by banks. The cash flows from these activities required to service the loans are usually only available after several years, which means that financing is needed that has a long term and a high risk quality. The limited availability of bank loans for Indian SMEs is particularly evident among start-ups and young companies, companies in the growth phase and innovators. It is precisely these companies that have only very limited potential for self-financing and are dependent on a sustained external cash flow.

Access to risk capital proved to be particularly difficult. Until this project, the availability of risk capital was very limited and was only offered in the traditional growth sector of information and communication technology. Due to the high transaction costs and risks, only companies above a certain size were usually financed this way.

The project was intended to address precisely these two gaps in supply (tailor-made loans for innovative SMEs and venture capital). In 2010, even before the project started, SIDBI carried out a feasibility study to learn more about the financing needs of innovative SMEs from all clean-tech sectors. The study aimed to develop a financial instrument tailored to the needs of SMEs to support their development, market penetration and technology proliferation. The study covered the entire clean-tech sector, including renewable energy, energy efficiency, green construction, water supply and sanitation. In addition to traditional loan financing for working capital, risk capital was also made available, with the proviso that at least 20% of the total amount be disbursed as risk capital under the programme.

One reason for the lack of innovation financing was also the information asymmetry that existed between investors and borrowers due to the technical complexity of the industry. Assessing the technical feasibility of an innovation and the associated creditworthiness of the company requires special expertise, which the banks often did not have. This was the aim of the complementary measure (CM). Priority was given to strengthening SIDBI's know-how in the mezzanine and equity capital sector and in dealing with innovative projects and evaluating new technologies relevant to climate and the environment. SIDBI was the obvious choice for project implementation, as it was one of the few financial institutions that focused on SME financing and had shown the willingness to offer risk financing, which was unusual at the time.

The impact chain on which the approach is based is also plausible from today's perspective. The creation and use of a financial product specifically tailored to innovative founders was intended to boost the innovative power of SMEs and ultimately lead to the market launch of innovative products in the clean-tech sector. This was intended to increase the proliferation of climate and environmental technologies, while at the same time shaping India's economic growth in a way that protects the environment and conserves resources as well as stimulating employment in the future-oriented climate and environmental sectors. It also aimed to enhance the Indian financial sector by broadening the available range of financial products.

The project complemented other FC projects and projects of other donors implemented through SIDBI and was closely related in terms of content to the FC line “Promotion of RE measures in MSMEs” and “SIDBI environmental credit line[1]”. These projects only financed the use of environmentally friendly technologies, i.e. the user side, while the innovation programme targeted the supplier side. Other donors like AFD (France) and JICA (Japan) have also implemented projects through SIDBI, but limited to energy efficiency projects for the user side. With SIDBI, the World Bank granted a line of USD 500 million in 2015 to expand financing to MSMEs in the manufacturing and service sectors.

The project approach was in line with the Indian government's efforts to reduce CO2 emissions, promote solar energy, improve energy efficiency and create sustainable housing development (green building). India's energy efficiency strategy included promoting the market launch of energy-efficient products for households and companies and further developing the market for energy services. Due to the high export activity of the SME sector and its potential to create jobs, improving lending to SMEs has been and remains a central component of India's political agenda. One of the Indian government's promotional approaches in the area of SME financing to date has been to increase key priority sector lending consistent with the project.

The relevance is rated good against this background.

Relevance rating: 2

Effectiveness

The modular objectives defined at project appraisal were to increase market-oriented research and development activities of start-ups and SMEs in the key areas of climate, environmental and resource protection and, as a result, to introduce innovative climate and environmentally friendly products, processes and services to the Indian market. In addition, the project-executing agency was tasked with creating a range of sustainable finance products that are specifically tailored to the needs of innovative SMEs in the area of environmental technologies. For the purposes of evaluation, the latter aspect of the goal is extended to include the use of the credit line by the target group, which is already implied by the formulation of the indicators.

The target achievement at outcome level can be summarised as follows:

Indicator	Target value at PA	Ex post evaluation
At least 60 of the qualified companies that operate in the clean-tech industry have been able to bring new innovative products to the Indian market with the programme's help.	At least 60	54 (largely achieved)
3 years after full disbursement, 60% of the financed companies are still active on the market.	At least 60%	100% (achieved)

[1] BMZ no. 2007 66 295, evaluated in 2016 with an overall rating of 3

Projects with an investment volume of at least EUR 65 million were implemented	EUR 65 million	EUR 34 million (not achieved)
At least 20% of the commitment volume was provided as risk capital (mezzanine capital or equity) under the programme	20% of the commitment volume	16% (not achieved)
At least half of the companies financed under the programme received risk capital financing (mezzanine capital or equity)	At least 50% of the number of companies	50% (achieved)
Portfolio quality: under the programme, SIDBI overall covers at least the risk costs and refinancing costs through margin and exit proceeds	Costs covered	Achieved, confirmed by SIDBI

In the first two years of project implementation, lending to SMEs progressed very well, which confirmed the demand for loan products in this specific segment identified in the project proposal. Companies from all clean-tech sectors were financed (renewables, energy efficiency and sustainable agriculture), both in the production and service sectors.

Despite the measures taken to ensure rapid implementation of the project (see also section on efficiency), it was only possible to disburse 64% of the entire line to the end customers due to the premature end of the project.

One of the reasons for the incomplete disbursement was that SIDBI is the only apex institution in India - and therefore the main recipient - of relevant financing to promote SMEs. The credit lines of various international development and financing organisations compete with each other or are displaced by funds from the Indian government, which, when considering individual credit lines, may prevent a successful and full disbursement of the funds to the end customers. During project implementation, the Indian government provided additional funding for SMEs. The programme called SIDBI Make in India Soft Loan Fund for MSME (SMILE) had a total volume of INR 10,000 crore (around EUR 1.25 billion). Under the SMILE programme, low-interest loans (roughly 200 basis points cheaper than the FC line) were extended to SMEs. In order to achieve the defined SMILE goals, SIDBI disbursed loans that would also have been suitable for refinancing under the FC credit line, so that when SMILE was introduced the disbursements of FC funds dropped abruptly. In addition to this substitution effect, the Indian government declared all INR 500 and 1,000 banknotes in circulation invalid at the beginning of November 2016 and at the same time introduced new INR 500 and 2,000 banknotes to fight the informal sector and the financing of illegal activities and terrorism. The result of these measures was a week-long shortage of cash, which led to economic disruption and low demand for credit. This prompted SIDBI to further reduce the already low interest rates on SMILE funds, which further diminished the relative attractiveness of the FC funds. It is important to note that the refinancing costs mentioned in the "portfolio quality" indicator do not include the costs of exchange rate hedging[2]. This is significant because another reason for not fully implementing the line or not taking up part of the funds (EUR 19.3 million) were the costs associated with the line which SIDBI had to bear (in particular the costs of exchange rate hedging and the costs of the state guarantee).

Although the positive developments in project implementation in the first two years were negatively affected by external factors and led to non-acceptance of EUR 19.3 million, or about 36% of the total amount, we rate the effectiveness as satisfactory since the implemented part produced the hoped-for effects. This enabled innovative products to be launched on the Indian market, while at least some of the SMEs were given access to the previously lacking venture capital financing.

Effectiveness rating: 3

[2] Exchange rate hedging was necessary because SIDBI had provided the funds in INR, but had to repay in EUR.

Efficiency

SIDBI was able to implement the line very quickly as a result of the good preparation under the complementary measure. The accompanying consultant reported that all relevant departments within SIDBI provided significant support in programme implementation, resulting in many sales staff being trained in a relatively short period of time, which led to a high level of awareness of the project and rapid pipeline development within the organisation.

The approval procedures for the granting of loans were also fast and efficient, as all the necessary lending procedures were already in place at SIDBI. The companies were able to apply for the loans at the nearest branch and the loan approval procedure went through various credit committees within the bank, depending on the loan amount.

The good initial outflow of funds can be seen as an indication that the loan funds were quite attractive from the point of view of the final borrowers. However, due to the introduction of more attractive and essentially competing national funds, EUR 19.3 million of the FC line was repaid in March 2018 (the funds of the complementary measure were fully disbursed). The loans granted by SIDBI in local currency bore interest at around 11% p.a., while the conditions of the SMILE line ranged between 7.5% and 10% p.a. The credit line became less attractive after the introduction of SMILE, not only for the final borrowers but also for SIDBI, as SIDBI had to bear considerable additional costs (see above).

The implemented part of the line was mainly allocated directly by SIDBI. Indirect lending was limited to a single intermediary (due to its more extensive experience with risk capital). In particular, in order to achieve the indicator related to risk capital, it would have been necessary to involve other venture capital funds, but they did not show any interest. This points to the limited attractiveness of the funds, also for financial intermediaries. However, another factor is presumably also the innovative nature of this product from the perspective of the end customer.

In particular, the parallel occurrence at SIDBI of different, mutually displacing financing products for partly identical target groups cannot be considered efficient in this context, and ultimately led to early repayment. Therefore we assess the efficiency of the project as not satisfactory.

Efficiency rating: 4

Impact

The overall objective formulated in the programme proposal of January 2012 was to contribute to environmentally sustainable economic growth by providing financing for innovative start-ups and SMEs in India, thus contributing to global climate and environmental protection and to the development of the financial system in India.

Although the achievement of this aspect of the objective cannot be quantified, it seems plausible that the impacts at outcome level (particularly with regard to the indicator for the market launch of new products in the clean-tech sector) made a contribution to the overall objective.

At the same time, companies from the clean-tech sector have access to additional financing opportunities that were previously unavailable, which can be attributed to the further development of SIDBI in this area, even though the refinancing funds now come from other (national) sources. Ultimately, with the evaluated programme, SIDBI was the first financial institution in India to offer a suitable product and, with the help of the acquired knowledge, was able to develop other products in this area. To this extent, SIDBI has established itself as a financier of innovation in the Indian market.

Although it was not possible to have a structural effect on the financial sector in the sense of imitators among other financial intermediaries, SIDBI has nevertheless succeeded in positioning itself as a bank that finances innovations in the area of clean-tech and promotes sustainable development, and has continued to be active in this sector - in this case for the first time through a supply-oriented programme. If SIDBI continued to focus on cooperation with financial intermediaries, it could also increase its reach.

We rate the impact as satisfactory.

Impact rating: 3

Sustainability

Despite the reduction in the loan of EUR 19.3 million due to the high transaction costs, the cheaper SMILE line and the economic turbulence during project implementation, SIDBI continued to finance innovation beyond the existence of the FC credit line. The complementary measure supported SIDBI in specific capacity building and provided the necessary knowledge and understanding to finance clean-tech innovations and to accurately assess the associated risks. It can be assumed that SIDBI will remain one of the most important financial institutions in India and act as a provider of innovation financing. SIDBI is still seen as the most important actor in promoting MSMEs by the Indian government. These expectations can also be justified by the fact that after the implementation of the FC line SIDBI independently developed and implemented products to promote clean-tech SMEs (green finance: installation of solar panels; machinery and equipment financing; acquisition and replacement of old with new, more energy-efficient machines). SIDBI thus remains true to the idea of sustainable economic development by financing projects that benefit the climate and the environment. At the same time, the capacities created during the complementary measure have clearly been maintained.

After the project was completed, SIDBI discontinued risk financing and is now concentrating on the proven lending business. The reason for this is the (naturally) higher non-performing loan (NPL) ratio of this type of financing (30% of the portfolio compared with the less than 10% NPL ratio for regular lending business). Of the 28 companies that received risk capital from the FC line, 4 are classified as NPLs.

Many of the SMEs financed under this project have confirmed that their business position has improved significantly. With the financing they received, they were able to expand their business, which led to improved production and higher revenues. These companies were subsequently able to rely on further financing from other investors. The future prospects of these SMEs have therefore also improved as a result of the project.

Against this background we rate the sustainability as satisfactory despite early repayment of the credit line and the discontinuation of risk financing.

Sustainability rating: 3

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

Projects (and programmes) are evaluated on a six-point scale, the criteria being **relevance, effectiveness, efficiency** and **overarching developmental impact**. 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.

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

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).