

Ex Post-Evaluation Brief India: Private Sector Infrastructure Facility at State Level (PSIF)



Programme/Client	Private Sector Infrastructure Facility at State Level BMZ nos.: 2001 66 280 (Investment) and 2002 70 348 (Accompanying measure)		
Programme executing agency	An Indian institution for infrastructure finance		
Year of sample/ex post evaluation report: 2012*/2012			
	Appraisal (planned)	Ex post-evaluation (actual)	
Investment costs (total)	EUR 86.00 million	EUR 54.00 million	
Counterpart contribution (company)	EUR 1.50 million	EUR 0.75 million**	
Funding, of which budget funds (BMZ)	EUR 86.50 million EUR 18.50 million	EUR 54.75 million EUR 9.25 million	

^{*} random sample; ** EUR 0.33 million earmarked for accompanying measure as at ex post evaluation

Project description: The programme encompasses a line of credit extended to a 40 percent government-owned finance institution (subsequently apex institution) operating country-wide, to refinance five private infrastructure projects in the four sectors of road construction, telecommunications, energy and water supply in the four Indian states of Rajasthan, Andhra Pradesh, Tamil Nadu and Orissa. The programme delivered a composite finance solution comprising an IDA loan plus two KfW market fund loans worth a total of EUR 54 million, and an accompanying measure worth EUR 0.75 million.

Objective: Overall objective: Make a contribution toward economic development and toward improving living conditions through quantitative and qualitative improvement of economic infrastructure in proreform Indian states. The overall objective was to be achieved through the following project objectives:

- 1. Contribution toward improving finance options for private investment in infrastructure.
- 2. Contribution toward long-term development of the capital market at the long end.

Target group: The direct target group of the project comprises domestic and foreign project developers, investors and operators that are owned at least 51 percent by private investors. The end beneficiaries, however, are the respective users of the improved economic infrastructure, meaning chiefly trade and industry, and as a result the entire population.

Overall rating: 3

Of note: Although the project did not achieve its set objectives of financial system development, private capital was mobilised for infrastructure finance. Using these funds, investments were made that must be deemed a success. This demonstrated that the private sector can make a contribution toward infrastructure development in India.

Sustainability Project Average rating for region (from 2007) Page 14 Average rating for region (from 2007)

EVALUATION SUMMARY

Overall rating: 3

Relevance: The project addressed the poor availability of long-term finance for private infrastructure projects. By doing so it tackled one of the key constraints to development within the Indian economy at the time, namely inadequate physical infrastructure (roads, telecommunications, energy etc.). The design of the project was aligned with the strategy first outlined by the Indian Government in the latter's Ninth Five-Year Plan (1997-2002), and as such was integrated into the national development strategy. Furthermore, the intervention by German FC was also designed to complement the measures of other regional and bilateral development organisations (Asian Development Bank, World Bank, Japanese development cooperation etc.). By strengthening economic performance capability and including private sector development, the project reflected the German Government's priority areas for cooperation with India, and complied with the relevant sector strategies.

Delivering the project through an apex institution offered the potential not only to finance investment in infrastructure, but also to strengthen the financial sector's long-term capability to supply credit for infrastructure investment.

In harmony with various companies in the sector, during the course of implementing the programme the executing agency, which is 4% government-owned, broadened its business portfolio. Whereas at appraisal the programme executing agency was focused on investment finance for infrastructure projects, when we conducted the ex post evaluation the programme executing agency was also engaged to a greater extent in (technical) project development and implementation. This is having a positive strategic effect on the realisation of infrastructure projects involving the private sector, because the programme executing agency is now able to handle both the financing and implementation of large-scale projects on a one-stop basis. At the same time, however, this also entails potential risks concerning the extent of the programme results in the field of financial system development. The results hypothesis formulated at appraisal was that by combining incentives to the supply of long-term investment capital with the selection of pro-reform Indian states, an investmentfriendly climate could be created and private investment projects then successfully realised. The hypothesis remains valid. This addresses a major bottleneck in development, because when the project was appraised the realisation of major infrastructure projects was largely left to public institutions, which were not able to meet the demand for infrastructure on their own. The programme approach of prompting the private sector to step up its engagement in the realisation of major infrastructure projects thus offered a rather innovative way of accelerating infrastructure development.

Although major progress was made in infrastructure development and poverty reduction in the last decade of development, the continued rapid growth of the Indian economy is dependent on infrastructure. Long-term capital and private-sector engagement will also be required for this in the future. This was made clear by the Indian Government in its Eleventh Five-Year Plan (2007-2012).

Consequently, we rate the relevance of the programme as still high. Sub-Rating: 2.

Effectiveness: The programme objectives defined at appraisal were (1) a "contribution toward improving finance options for private investment in infrastructure" and (2) a "contribution toward long-term development of the capital market at the long end" To measure the achievement of these objectives, two indicators were defined at the level of the programme executing agency: (i) "swift allocation of the credit line (within 4 years)" and (ii) "increase in the long-term lending and deposit business of the financial institution". Seen from today's perspective, the objectives chosen were appropriate.

The first indicator was almost achieved, but not quite (allocation took 4 years and 11 months), as the programme executing agency was not able to present sufficiently suitable projects, and therefore could not allocate the credit line within 4 years. Nevertheless, the funds provided as part of the FC measure were used to finance infrastructure projects of significantly longer duration than is normally the case in the programme executing agency's project finance portfolio, on average. We can therefore assume that a contribution was made toward improving finance options for private investment in infrastructure. Consequently, despite the delay in the allocation of the funds we can consider project objective (1) to have been achieved.

By contrast, the second indicator was missed by a significant margin. Despite a contrary trend within the sector (see "Impact" below), the average term in the programme executing agency's portfolio fell between 2005 and 2012 from around 12.5 to 8.5 years. This general shortening of terms is based on the project-specific demands that made possible the shorter financing terms during the period under review. However, this was not the case for the projects financed using FC funds. In the three projects visited by the evaluation mission, the FC funds were employed with terms of 16 to 20 years.

Due to the shortening of average terms in the project executing agency's investment finance portfolio, we consider that objective (2), which was based on a contribution to developing the financial system, was not achieved.

The accompanying measure, from which feasibility studies were funded for the programme executing agency, was also supposed to support the latter with project selection and design. However, at the present point in time only few studies have been conducted, which, moreover, were not connected with the investments financed through the FC measure. In the seven years since the contract was signed, only 45% of the funds from the accompanying measure were allocated, for a total of five feasibility studies. This is also reflected in the time taken to allocate the line of credit, which was longer than envisaged. Consequently,

we must rate the accompanying measure, and therefore its contribution toward achieving the objectives, as unsuccessful.

In this case, the attempt to use the programme to promote both the capital market and the infrastructure sector simultaneously did not succeed. This was presumably due to differences in financing needs (not all infrastructure finance solutions require long-term loans), and the diversity of interventions by the programme executing agency, which in the course of implementing the FC measures shifted toward project implementation plus financing on a one-stop basis.

We note that a reduction in terms was evident in the programme executing agency's investment credit portfolio, and that the effectiveness of the accompanying measure was low. At the same time, though, we note that the programme made a positive contribution towards the financing of long-term investment in infrastructure, demonstrating that the private sector can also finance public infrastructure. We therefore rate the effectiveness of the programme as satisfactory. Sub-Rating: 3.

Efficiency: The FC loan was used to finance three projects (two toll roads, one water treatment installation for an oil refinery) in which the programme executing agency was both financier and operator at one and the same time, plus a further two projects (mobile communications, power generation) in which the programme executing agency engaged independent operators. The FC loan was extended to the programme executing agency at the going rate as far as the interest rate was concerned, although according to the programme executing agency the very long term of the FC loan was not customary in the market setting, and at that point in time loans with that kind of maturity were only being extended by development banks.

The impression gained by the evaluation mission was that the FC funds were being used for appropriate investment projects, the majority of which were benefitting the population directly. This is also reflected by the fact that the Indian Government was also involved, in the form of equity and/or debt capital. Since the financed projects were also infrastructure projects with construction phases in some cases of several years, and long amortisation periods, the long-term FC funds with grace periods were able to complement the short- to medium-term market funds appropriately.

The programme executing agency has a non-performing-loan (NPL) rate of < 1%, which reflects among other things good credit analysis and good lending processes. The programme executing agency also achieves constant portfolio growth and generates sufficient profits. A further indication of the programme executing agency's efficiency is its ability to finance projects within finance consortia involving both public and private members. Managing these is significantly more demanding than is the case when simply extending individual loans. Therefore, we rate both the efficiency of production and – bearing in mind the investments financed through the FC loan – the efficiency of allocation as good.

However, in our view the cost-benefit ratio of the accompanying measure must be considered inefficient (see "Effectiveness" above), as it made no contribution to the FC measure. Based on the good productive efficiency of the programme executing agency and the good allocative efficiency of the funds employed, while bearing in mind the inefficiency of the accompanying measure, we rate the efficiency of the programme as good. Sub-Rating: 2.

Overarching developmental impact: The overall objective was defined as "making a contribution toward economic development and toward improving living conditions through quantitative and qualitative improvement of economic infrastructure in pro-reform Indian states". Basically the measure did contribute toward achieving the overall objective, as reflected for instance in the improved mobility for businesses and the population achieved through the road construction projects. At the same time we must note that recent years have been marked by a positive overall trend in the Indian economy in general and the construction sector in particular (here the problem of attribution arises), and that long-term finance solutions are becoming more common. Therefore, in retrospect we cannot say whether or not there might have been other finance options for project realisation. Given that at the time of appraisal long-term loans of this kind were only being extended by development banks, however, what we can say is that there seems to be no suggestion that private financiers were crowded out by the FC loan. In particular, the terms of the programme executing agency's investments that were financed through the FC loan, which compared to the average terms of the investment portfolio were long, support the assumption that the funds were used for projects that might otherwise not have been realised by the private sector.

At the level of project affiliates (see "Efficiency" above), the delegation was able to visit the programme executing agency's three affiliates realising the infrastructure projects on a "one-stop basis". Concerning the other companies that were merely financed by the programme executing agency, and implemented the projects independently, only little information could be supplied to us by the programme executing agency. Since both companies repaid their loans to the programme executing agency ahead of time, and even used private capital to reschedule, we might be tempted to assume that the realised investments in infrastructure were a success. Nevertheless, since the contractual relationship has come to an end and there is now no longer a prevailing obligation to provide information, especially concerning the impact for these two project affiliates, we are unable to offer an assessment.

The three affiliates of the programme executing agency displayed employment- and income-generating effects typical of large-scale projects. Especially in the case of the two toll roads, and in the case of the water treatment plant, a relatively large number of relatively low-qualified, temporary workers and a relatively small number of engineers were/are being employed. During the construction phase some 35,000 temporary jobs were created, as were 600 permanent jobs for operation.

According to the appraisal report the direct target group comprised domestic and foreign project developers, investors and operators that are at least 51 percent privately owned. With the exception of one of the two toll roads, which is only 50 percent privately owned, this target group was reached. In retrospect, however, the delegation takes the view that no negative consequences result from this exception, given that private shareholders still own 50% of the shares. The end beneficiaries are the respective users of the improved economic infrastructure (in the road construction, telecommunications and energy sectors), which means chiefly trade and industry, and as a result also the population as a whole. In the road construction projects the delegation observed direct positive effects on the population. Construction of the trunk road (or highway) in the Thar Desert (a self-financing toll road), connecting large swathes of the country to the national road network, has for instance provided many people with greater mobility and created numerous new employment opportunities.

Based on the good impact we observed at the three project affiliates we visited, and the good impact to be assumed in the case of the two projects repaid ahead of time (mobile telecommunications, power generation), we rate the impact as good. Sub-Rating: 2.

Sustainability: The sustainability of the programme executing agency is good, as underlined by its financial success over the last three decades. Since the programme executing agency was established (1987), this institution has made a profit every year, and has succeeded in continuously developing its areas of business. The long-term, self-reliant, financial viability of the five infrastructure projects also appears plausible, even though at the time of the ex post evaluation three of the infrastructure projects had not yet reached break-even point (the latter was not, however, envisaged in the respective business plans). While one road construction project will reach the break-even point on time, according to the programme executing agency the other will break even after only 12 years (as opposed to the 14 years initially planned). In the case of the water treatment plant there was a twoyear delay caused by external factors, which continue to delay commissioning to this day. However, at the time the evaluation was carried out there was no indication that these project affiliates will be unable to amortise their loans to the programme executing agency as planned. According to the programme executing agency the other two private projects are operating profitably and their financial situation is good (mobile telecommunication services, power generation).

The information gathered during the evaluation mission's visits to the project affiliates also indicates that the results are very probably sustainable as far as organisation, human resources, and financial and technical capacities are concerned. At the two road construction projects that are already operational the delegation was for instance able to see for itself evidence of regular maintenance works. It was also able to visit the compensation programmes (employment promotion) that were necessitated by resettlement (e.g. road construction). Sustainability is also in place with respect to the contractual constellation of the infrastructure projects, in which the respective project affiliates have been guaranteed a

limited period of use through the award of a concession (e.g. 20 years for one road construction project, 32 years for the other).

The sustainability of the programme executing agency is to be rated as good, although its potential for achieving results in the field of finance is limited due to its increased engagement as a project developer and project implementing organisation. The infrastructure projects have not yet achieved sustainability in all cases, but very probably will do so in the future. We therefore rate the sustainability of the programme overall as only satisfactory. Sub-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 <u>relevance</u>, <u>effectiveness</u>, <u>efficiency</u> and <u>overarching developmental impact</u>. The ratings are also used to arrive at a <u>final assessment</u> of a project's overall developmental efficacy. The scale is as follows:

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

Ratings 1-3 denote a positive or successful assessment while ratings 4-6 denote a not positive or unsuccessful assessment

<u>Sustainability</u> 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 <u>overall rating</u> on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Ratings 1-3 of the overall rating denote a "successful" project while ratings 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" (rating 3).