Indonesia: Loan Programme Industrial Pollution Control

Ex-post evaluation

OECD sector	3212 – Industrial development	
BMZ project ID	1994 66 186	
Project-executing agency	Ministry of the Environment/BAPEDAL	
Consultant	GFA – IMC International Management	
Year of ex-post evaluation	**2005**	
	Project appraisal (planned)	**Ex-post evaluation (actual)**
Start of implementation	1st quarter 1997	4th quarter 1998
Period of implementation	36 months	60 months
Investment costs	No information available	No information available
Counterpart contribution	No information available	No information available
Financing, of which Financial Cooperation (FC) funds	EUR 7.1 million	EUR 7.1 million
Other institutions/donors involved	None	None
Performance rating	**3**	
• Significance / relevance	3	
• Effectiveness	3	
• Efficiency	3	

Brief Description, Overall Objective and Project Objectives with Indicators

The project comprised the establishment of a revolving credit fund in the amount of EUR 7.1 million to finance industrial pollution control measures. The Indonesian public environmental agency BAPEDAL acted as project-executing agency. The Ministry of Finance performed the apex function. The FC funds were transferred by the Ministry of Finance to selected commercial banks. The project objective was defined as (a) the reduction of industrial environmental pollution, especially of high organic load effluents and (b) successful lending to SMEs. The overall objective was to contribute to improving the environmental situation in selected regions in Indonesia. The primary target group are small and medium-sized industrial enterprises, which discharge substantial volumes of effluents in the regions of Garut, Sidoarjo und Pati and which have already been covered by another programme implemented by the environmental agency BAPEDAL (PROKASHI) and are situated in regions supported by the GTZ. Under a complementary measure, the project-executing agency, the apex institution and the participating commercial banks were supported by a consultant with regard to environmental issues concerning the identification, preparation and implementation of investment measures. For this purpose altogether EUR 1.3 million were provided in the form of an FC grant.

The indicator for the achievement of the project objective (a) was the compliance with pollution limits by at least 80% of the enterprises promoted after a period of operation of three years. The indicator for the achievement of the project objective (b) was the timely rendering of the debt service for at least 85% of the loans outstanding.

Project Design / Major Deviations from the original Project Planning and their main Causes

The project concept envisaged to establish a revolving credit line to finance 100% of the investments that were designed to substantially improve environmental pollution caused by industrial companies. The target group comprised small and medium-sized enterprises (SMEs) in selected regions. The geographic limitation envisaged at the time of the project appraisal was cancelled as a result of the low demand for environmental loans in the wake of the Asian crisis. The maximum loan amount for sub-borrowers was fixed at IDR 700 million (approx. EUR 225,000 at the time of the project appraisal). Loan terms of up to 10 years were possible. Interest terms were fixed on the basis of the money market rate for 3-months papers (SBI rate). Here the original project concept was modified: As from 1999 interest rates charged to sub-borrowers were no longer tied to the SBI rate. At the time the SBI rate was over 40% p.a. and the Indonesian side emphasized that given the difficult economic situation environmental investments were not attractive on such interest terms and, thus, were not in demand. As a result, depending on the loan term and the collateral provided, the interest rate was agreed to range between 9% and 14% p.a. The same applied to the sub-borrower interest rates charged in the period 2000 until 2004. Except for the crisis year 1999 sub-borrower real interest rates were positive at all times.

The project was to be implemented as an apex structure. The implementation structure was planned to comprise Bank Indonesia, the Indonesian central bank as apex bank, and several commercial banks as implementing banks. The environmental agency BAPEDAL was selected as project-executing agency. Advisors financed under the complementary measure were to ensure the efficient implementation of the project in the context of a “Technical Assistance Unit” (TAU). Compared with the original implementation concept the following modifications were made: Bank Indonesia was replaced by the Ministry of Finance because the central bank was no longer in the position to act as apex bank due to changes in the legal regulations. The project-executing agency BAPEDAL was integrated into the Ministry of the Environment. Due to bureaucratic procedures in the Ministry of Finance the times required for the processing of loan applications were very long. In an FC follow-up project this serious deficiency of the project was taken account of by involving two commercial banks as apex banks.

Altogether five state-owned commercial banks were involved in the project as on-lending banks. The banks participating in the programme were jointly determined at the start of the project by the Indonesian partners and KfW. Three of these banks (BNI, BPD Jateng and BPD Bali) accounted for a share of 91% of the projects and 82% of the total loan volume.

At the time of the ex-post evaluation 68 projects had been financed in the context of the first use of funds from the credit line. In addition, two new projects had been financed from funds provided under the credit line on a revolving basis (second use of funds) and a pipeline of further nine projects in the amount of approx. IDR 16.4 billion (EUR 1.4 million) had been built up. The main reason for the relatively hesitant use of revolving funds is that the Ministry of Finance has still not made available funds from interest payments made by sub-borrowers. Such funds are designed to be used under the complementary measure to support the banks in identifying and preparing new projects. The use of such funds is an important prerequisite to ensure the proper functioning of the revolving fund and the sustainability of the project measures.

The objective of the complementary measure was to generate higher demand from companies for loans to finance environmental investments and to improve the know-how of the staff involved in the project at the executing agency, the apex institution and the commercial banks. While the complementary measure helped to improve the technical competence of the staff involved in the Ministry of Finance as project-executing agency, it is doubtful whether the objective of sustainability of the advisory services provided to the commercial banks was achieved. None of the implementing banks established environmental lending as an institutionalised potential area of business. Equally, the banks did not build up any specific know-how and competence with regard to environmental matters. Realistically, this cannot even be expected from small development banks operating regionally. However, it was possible to compensate for these deficiencies on the part of the implementing banks through the establishment of a special fund for environmental advisory services for these banks. One third of the fund comes from interest payments made by the implementing banks to the Ministry of Finance. These payments will ensure the financing of external technical know-how for the commercial banks also after the termination of FC financing and the conclusion of the assignment of the FC consultants. In line with the delays in the implementation of fixed investments the implementation of the complementary measure was also significantly delayed. The start of the complementary measure, which had originally been planned for the year 1997 was put off until November 1998 and the consultant’s assignment, which had been planned to last three years actually lasted 45 months. Accordingly, in 2002 the financial contribution for personnel support was increased by EUR 0.48 million and the Consulting Contract was prolonged until March 31, 2002. With regard to the contents and design of the complementary measure there were no major deviations from the original concept.

Key Results of the Impact Analysis and Performance Rating

One of the main effects of the project expected at the time of the project appraisal was a contribution to reducing environmental pollution caused by industrial enterprises. In addition, the project was expected to raise and support sub-borrowers interest in environmentally relevant investments. These objectives show that the project was primarily environment-oriented. At the time of the ex-post evalutation altogether 68 individual environmental projects had been financed. At that point in time the environmental investments financed were functioning and largely met the required environmental standards. Due to the revolving use of the environmental credit line and the externally provided technical assistance (financed by a fund fed from interest payments) the prerequisites to achieve structural effects in the financial sector have in theory been created: A new financing instrument ("environmental loan") was for the first time established in the Indonesian financial sector and, thus, a sound structure was set up to ensure the sustainable revolving use of the funds provided. Due to the very bureaucratic working practices of the Indonesian Ministry of Finance, however, considerable delays have occurred in the use of the funds available for technical assistance and as a result the revolving use of loan funds for lending at the second or third stage proceeds only sluggishly.

In summary, we have arrived at the following assessment of the developmental effectiveness of the project:

<u>Effectiveness</u>

The project objectives were defined as (a) the reduction of industrial environmental pollution, especially of high organic load effluents and (b) successful lending to SMEs. Measured by the defined target indicators we judge the environmental effectiveness of the project as sufficient. We consider the structural effects achieved in the financial sector as still sufficient. A new financing instrument (environmental loan) has been established in the Indonesian financial sector. The lack of technical know-how on environmental matters on the part of the implementing banks and the insufficient organisational institutionalisation of environmental lending as a financial product, however, are compensated in theory through the technical advice on environmental matters provided on a long-term basis by external consultants and financed partly from interest revenues (revolving funds). Due to the deficiencies of the apex structure, however, the funds available for technical advice can be used only sluggishly. As a result the revolving use of the FC funds for lending at the second or third stage is considerably retarded. There is the risk that the revolving use of the loan funds will completely come to a halt. However, the apex structure was sustainably improved for phase II of the project, which is currently being implemented. Overall, we judge the project's **effectiveness** as sufficient **(sub-rating 3)**.

<u>Significance / Relevance</u>

The overall objective of the project was to contribute to improving the environmental situation in selected regions in Indonesia. With the altogether 68 projects financed, which have had substantial positive environmental effects, the project made a sufficient contribution to the achievement of the overall objective. In our view the relevance of the project approach is obvious. In the context of this FC project it was shown in an exemplary way that the provision of environmental loans can make an important contribution to improving the environmental situation. The significance of the developmental impacts is sufficient. Moreover, the project had broad-scale impacts. The FC funds are being used – though sluggishly – on a revolving basis to finance environmental investments. We classify the programme's **significance/relevance** as overall sufficient **<u>(sub-rating 3)</u>**.

<u>Efficiency</u>

The production efficiency (adminstrative costs, interest margin, operative efficiency) of the implementing banks is overall sufficient. Due to the positive real interest rates we also rate the allocation efficiency of the project as sufficient. In general, the use of loans by the enterprises was efficient. The same goes, with certain restrictions, for the programme-executing banks, whose interest rates on sub-loans were in most cases positive in real terms. The quality of the portfolio is acceptable. The delayed project implementation (5 years as compared with the planned 3 years) and especially the protracted loan processing (of more than 6 months) is considered as sub-optimal. The apex structure involving the Ministry of Finance is mainly to be blamed for the slow implementation of the project. Overall, we rate the project's efficiency as sufficient (**sub-rating 3**).

When giving an overall assessment of the developmental effectiveness of the project it has to be taken into consideration that the project was a pilot project, which met with problems of acceptance from the Indonesian side in its early stages. Moreover, the project was implemented under extremely difficult conditions (the Asian financial crisis) and due to this crisis the implementation concept had to be modified (for instance with regard to the apex institution) in the course of the project. In a summarised assessment of the above impacts and risks we rate the programme as having an overall sufficient developmental effectiveness **(overall evaluation: rating 3)**.

Sustainability risks result, among others, from the deficits which the environmental authorities have in monitoring the proper operation of the environmental facilities due to their limited personnel and financial resources. However, this applies only to end-of-pipe measures and not to recycling facilities and integrated clean production measures. The described deficiencies in the apex structure might lead to a situation where the revolving use of the FC funds for environmental lending comes to a complete halt, especially due to administrative delays in the Ministry of Finance in the provision of funds for technical advice.

General Conclusions

If several financial institutions qualify for the parallel implementation of environmental loans, an APEX structure is usually recommendable. Under such an apex structure, all qualified institutions will then basically have equal access to refinancing funds and will have to compete for the funds. If required, the funds can be offered to interested banks by way of an auction and extended to the highest bidder.

In the present project a useful and practicable solution was found to finance external technical assistance to support the project-implementing banks also after the conclusion of the complementary measures. A part of the interest revenue is paid into a revolving fund, from which the implementing banks can finance technical support for the implementation of environmental loans.

Legend

Developmentally successful: Ratings 1 to 3	
Rating 1	**Very high or high degree of developmental effectiveness**
Rating 2	**Satisfactory developmental effectiveness**
Rating 3	**Overall sufficient degree of developmental effectiveness**
Developmental failures: Ratings 4 to 6	
Rating 4	**Overall slightly insufficient degree of developmental effectiveness**
Rating 5	**Clearly insufficient degree of developmental effectiveness**
Rating 6	**The project is a total failure**

Criteria for the Evaluation of Project Success

The evaluation of the "developmental effectiveness" of a project and its classification during the ex-post evaluation into one of the various levels of success described in more detail below concentrate on the following fundamental questions:

- Are the **project objectives** reached to a sufficient degree (aspect of project **effectiveness**)?
- Does the project generate sufficient **significant developmental effects** (project **relevance** and **significance** measured by the achievement of the overall development-policy objective defined beforehand and its effects in political, institutional, socio-economic and socio-cultural as well as ecological terms)?
- Are the **funds/expenses** that were and are being employed/incurred to reach the objectives **appropriate** and how can the project's microeconomic and macroeconomic impact be measured (aspect of **efficiency** of the project conception)?
- To the extent that undesired **(side) effects** occur, are these tolerable?

We do not treat **sustainability**, a key aspect to consider for project evaluation, as a separate category of evaluation but instead as a cross-cutting element of all four fundamental questions on project success. A project is sustainable if the project-executing agency and/or the target group are able to continue to use the project facilities that have been built for a period of time that is, overall, adequate in economic terms, or to carry on with the project activities on their own and generate positive results after the financial, organisational and/or technical support has come to an end.