The Philippines: Environmental Protection in Industry II

Ex post evaluation report

| OECD sector | 24030 - Financial intermediaries in the formal sector |
| BMZ project ID | 1999 66 615 (2008 random sample) |
| Project executing agency | Development Bank of the Philippines |
| Consultant | --- |
| Year of ex post evaluation report | 2009 |

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<th>Project appraisal (planned)</th>
<th>Ex post evaluation (actual)</th>
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<tbody>
<tr>
<td>Start of implementation</td>
<td>QI 2000</td>
<td>QII 2002</td>
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<td>Period of implementation</td>
<td>48 months</td>
<td>55 months</td>
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<tr>
<td>Investment costs</td>
<td>EUR 9.36 million</td>
<td>EUR 9.36 million</td>
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<td>Counterpart contribution</td>
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<td>Financing, of which Financial Cooperation (FC) funds</td>
<td>EUR 9.36 million</td>
<td>EUR 9.36 million</td>
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<tr>
<td>Other institutions/donors involved</td>
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<tr>
<td>Performance rating</td>
<td>2</td>
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<tr>
<td>• Relevance</td>
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<td>• Effectiveness</td>
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<td>• Efficiency</td>
<td>3</td>
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<td>• Overarching developmental impact</td>
<td>3</td>
<td>3</td>
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<td>• Sustainability</td>
<td>2</td>
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Brief description, overall objective and project objectives with indicators

As follow-up financing for the 'Environmental Protection in Industry' project, the aim of the project under evaluation, 'Environmental Protection in Industry II' (BMZ no 1999 66 615), was to contribute to the improvement of environmental conditions (including occupational health and safety) and to the more efficient use of resources (the overall objective). The project objective was the sustainable provision of loans to micro, small, and medium-sized enterprises (MSMEs) to finance investment in environmental protection measures. To this end, an FC loan in the amount of EUR 9.36 million (DEM 18.3 million) was made available to the Development Bank of the Philippines (DBP) as a revolving credit facility.

The project was supported by a supplementary measure in the amount of EUR 0.87 million (BMZ no 1999 70 237) which essentially took the form of associated consultancy services.

The overall objective would be considered to have been achieved if "in at least 80% of the investment projects, the environmental benefits which were anticipated when the application was submitted to the DBP had been achieved a year after completion of the relevant investment activity".
Achievement of the project objective would be determined by the following indicators:

1. In at least 80% of the investment projects, the environmental benefits which were anticipated when an application was submitted to the DBP should have been achieved a year after completion of the investment activity.
2. At least 88% of the FC loans and of all DBP direct loans should be serviced on time.
3. Overdue DBP accounts receivable should not exceed 8% of total DBP accounts receivable.

Project design / major deviations from original planning and their main causes

The project approach was to support the DBP in a specific area of financing: profitable environmental investments, each economically viable on its individual merits. We see this as both reasonable and appropriate. Since MSMEs play an important role in agriculture and the food industry, they make a significant contribution to water pollution. Moreover, they have little access to funds for long-term finance. Hence the focus on MSMEs is logical, especially considering the background: finance facilities specifically for MSMEs need to be created at the same time. Since the project primarily targeted environmental benefits, we consider it reasonable in principle to make suitable environmental loans available to larger companies as well.

During project appraisal, estimates of the expenditure required to raise awareness among MSMEs and to provide knowledge about environmental management proved too optimistic. Although, as per the agreement, credit was provided at around 2% below comparable market rates, only a few loans were disbursed in the first three years of the project term. In response to this, changes were made to the project: the investment limit was raised from PHP 30 million (approx. EUR 0.4 million) to PHP 60 million, and arrangements were made to ensure DBP staff and the MSMEs received concurrent advice from an external consultant. At the start of the project it had been envisaged that 75% of the total loan volume was to be extended to MSMEs, the percentage had been reduced to 30% of the volume in 2004. Presentations on successful projects were made to MSMEs, so that individual MSMEs served as a catalyst for others to invest, allowing a demonstration effect to take over. Over the course of the project, this served to sharpen the focus on the transformation of latent demand into a corresponding volume of business.

With the revolving line of credit in operation and 44 individual loans to date, results were eventually achieved across a fairly broad spectrum, with loan amounts averaging EUR 230,000.

The FC sum was provided to the DBP as a revolving FC loan. Interest on end-user loans averaged a fixed rate of 8.96%; in line with with the project planning, this was around 2% below the level of comparable market-oriented investment loans. All end-user loans were denominated in local currency.

Key results of the impact analysis and performance rating

The principal effects of the project were expected in the environmental domain, and also in the financial sector. The provision of financing products could motivate companies toward environmental investments, thereby achieving positive effects for the environment. The majority of the individual investments funded by the programme were either purely environmental, or included an environmental component. This underlines the primarily environmental nature of the programme.

In assessing the criteria for developmental success we have arrived at the following conclusions:

Relevance: The project concept was directed toward improvements in environmental conditions and more efficient use of resources, as well as deficiencies in the Philippine
finance and banking sectors with regard to the availability of long-term investment financing for MSMEs. This addressed major problem areas which still exist today, due to the underdeveloped state of the Philippine capital market and the limited awareness among MSME companies of the cost-saving potential of environmental protection measures and efficient resource utilisation. We consider the focus on MSMEs to be useful, considering the comparatively high proportion of production methods that do not conserve resources. At the same time, the sheer number of MSMEs offers the banks the opportunity, with a few comparatively small model investments, to develop a market for environmental financing with a proportionately high level of demand. We believe it was reasonable to support the end-user loans with a modest subsidy and offer them at around 2% below market rates of interest, since this provided incentives to design investments which would reduce harmful effects on the environment, and the additional expenditure on supplementary documentation and scrutiny was at least partially recompensed. The project encompassed the current development strategy of the Government of the Philippines with its emphasis on poverty reduction, funding for MSMEs, and funding measures for environmental protection and the efficient utilisation of resources. Furthermore, support for MSMEs and environmental protection measures constitutes an important issue for the Federal Ministry for Economic Cooperation and Development (BMZ), and for other donors in the Philippines. The donors take suitable steps to co-ordinate their environmental and financial initiatives.

The chain of effects underlying the project was as follows: strengthening the DBP's expertise in the environmental protection area together with providing funds for refinancing would, on the one hand, expand the financing of environmental investments as a field of business and, on the other, disseminate knowledge about more environmentally friendly production processes, thereby contributing to the development of new approaches to environmental investment. At the same time the project would contribute to the improved availability of loans for MSMEs. It is reasonable to assume that this can contribute to a substantial reduction in industrial emissions and resource consumption, as well as strengthening the MSME sector. (Rating 2)

Effectiveness: Over the course of the programme, the project objective indicators were comfortably achieved:

- From a total of 44 projects, 39 (88.6%) had achieved the intended environmental effects after a year, as planned. There were just three projects which, although they certainly made a distinct improvement to the environmental situation and also complied with the guidelines issued by the DENR (Department of the Environment and Natural Resources, a Philippine Government agency), did not however achieve the internal objectives of the DBP, which had obviously been set too high in these particular cases.

- From a total of 44 borrowers, 42 (98%) serviced the debt on time. In two cases, delays arose due to external factors. These were the responsibility of neither the borrower nor the DBP, and necessitated changes to the repayments schedule. However, such failures had not been expected. The contracts with the DBP made no distinction between FC loans and loans made directly by the DBP, as had been originally envisaged in the indicator. This does not appear logical. We certainly consider the indicator which was substituted - that, in 88% of the project loans, the debt would be serviced on time - to be appropriate; but it should be supplemented by another indicator, which considers the structural impact of the bank's overall environmental loans business.

- The proportion of loans in the DBP's overall portfolio with arrears greater than 30 days stands at 2.13%, well below the target value of 8% set in the project appraisal report (PAR).

In our opinion there should be, in principle, an additional indicator to segregate the business volumes which the DBP generated in this segment above and beyond this project.
Through the FC project, the DBP introduced lines of environmental credit for MSMEs for the first time. Up to this point, the DBP had only offered environmental loans to large-scale enterprises. The DBP has introduced environmental protection issues in its overall lending process, and has taken a leading role in this context. The bank plans to expand its environmental lending business beyond the existing lines of credit; by way of example, in September 2008 it agreed an ODA (Official Development Assistance) credit line with JICA (the Japanese International Cooperation Agency) for EUR 175 million.

Due to weak initial demand, loan disbursement at the outset was very sluggish. This indicates that the concession of approx. 2% on interest rates did not in itself serve as adequate incentive for economically viable environmental investments. Publicising a few pilot investments as examples, together with information events and further training, were critical factors in the ultimate acceptance of the credit programme. With 44 individual investments, the programme has proved effective across a reasonably broad spectrum, with a correspondingly positive reduction in environmental pollution. The borrowers' debt service is good. Overall in this project, the executing agency has demonstrated its ability to provide proper direction and to respond flexibly to requirements.

The project objective indicators for reducing emissions and resource consumption (primarily within existing MSMEs), and for successful, sustainable lending to MSMEs, were comfortably achieved. To a large extent, the environmental benefits which the borrowers pursued were realised. The default ratio in the portfolio of loans supported by the project, as in the bank's overall credit business, is good. The bank wants to develop its environmental financing business further.

Since the DBP occupies a pre-eminent position in the environmental financing domain, and since the MSME sector was addressed for the first time in this project, it represents a significant contribution to the inclusion of environmental considerations in the operating processes of MSMEs. (Rating: 2)

Efficiency: The bank's production efficiency is good. The DBP's portfolio at risk has improved significantly since programme appraisal; at the end of 2007, it was markedly below the industry average of 5.8%. As the executing agency, DBP operates with a satisfactory level of efficiency. Considering its developmental mandate and in comparison with the banking sector, the profitability of the DBP, measured by return on average assets (ROAA) and by return on average equity (ROAE), can be rated as good.

However, we evaluate the production efficiency of the project itself as no more than satisfactory. The unexpectedly limited abilities of the environmental authorities to bring matters to fruition, and the consequent lack of incentive for environmental investments, made it necessary to find an investment model which appealed to entrepreneurs through its cost reduction benefits. This adjustment, which brought with it a significant need for advisory services, was complicated by a high staff turnover in the environmental department.

With regard to allocative efficiency, it can reasonably be assumed that borrowers made consistently good use of the loans which were eventually financed. The facilities which had been financed were generally commissioned within an appropriate period. The DBP monitored compliance with statutory environmental standards on a regular basis, and checked progress against the DBP's internal targets for the environmental impact of individual projects. According to their information, 93% of the projects achieved the intended environmental effects within a year of commissioning. This was confirmed through on-site visual inspection of individual investment projects. We consider that the subsidised interest arrangement (loans were offered at 2% below market interest rates) was justifiable in the initial phase of establishing environmental loans, considering also the environmental benefits achieved. Despite this, demand for loans was sluggish,
indicating that the interest terms were not exceptionally attractive to the entrepreneur.
(Rating: 3)

Overarching developmental impact: The overall indicator, which covered environmental
effects, was achieved over an extended period. It is reasonable to assume that a
contribution was made to the improvement of environmental conditions, inasmuch as
the majority of investments financed have a demonstration effect for further DBP
lending. When issuing loans, the DBP defines quantifiable environmental standards
which are more stringent in places than the statutory requirements, and it monitors
compliance with these standards beyond the loan term. This represents a contribution
by those MSMEs that have received financing to the improvement of environmental
conditions. In this respect, by showing businesses that environmental investments are
profitable, the DBP fills a gap created in part by the limited governance and capabilities
of the environmental authorities.

This has raised awareness on this subject among MSMEs. In this regard, addressing
the MSMEs through the staff of the DBP awakens latent needs and translates them
into a genuine demand for profitable, beneficial, environment-oriented investments.

From the high proportion of MSMEs in the loans portfolio (77% of projects financed,
64% by volume), positive effects on employment, poverty reduction, and progress
toward millennium development goals (MDG) may safely be assumed. In the long term,
the demand for environmental technology that this has awakened could lead in turn to
the development of a local supply market. Compared with the initial situation, our
partners in the region report improvements in the local availability of environmental
consultants laboratories. Companies questioned as part of a random sample
confirmed for the most part that the investments had proved beneficial for them.

The DBP has established environmental financing as a field of business, and is also in
the position to monitor the environmental effects. These results, and also the methods
used for routine monitoring of target indicators, were confirmed through field visits and
inspecting credit records.

Further structural effects to date on the Philippine financial sector, however, are seen
as limited. This is mainly due to the dominant status of direct lending (retail lending).
Following the revision of the project concept in 2004, the DBP began to involve other
banks as intermediaries. These partner financial institutions — and therefore the
structural effects on the finance sector — are only likely to grow if the business for the
banks from individually profitable environmental investments can be given greater
prominence and clarity, using methods such as model investments.

Isolated investments linked to health services (predominantly for very small-scale water
treatment facilities, and occupational health and safety at private rural hospitals) may
be interpreted as a contribution to improvements in medical provision. (Rating: 3)

Sustainability: The DBP finds itself in a secure financial situation. Its capitalisation is
adequate, and is above the industry average. Even allowing for the possibility of an
increased provisions requirement for non-performing assets in the wake of the
economic crisis, capital cover should prove sufficient. The MSME sector and
environmental loans both come under the DBP’s developmental mission, and form part
of its core business. The recent formation of a dedicated MSME department and the
DBP’s environmental certification to ISO standards both indicate that the DBP has a
long-term interest, from both business and developmental perspectives, in financing
environmental protection measures within the MSME sector. A second ‘disbursement
round’ of funds already provided through the FC is imminent. In the future, the
Philippine capital market, which is not yet adequately developed, ought to make the
refinancing of special MSME projects mainly dependent upon the provision of long-
term ODA facilities.

On the basis of field visit results, and in view of the negligible level of loan defaults,
sustainable operation of the financed facilities may reasonably be assumed. The loan
repayment capability which has so far been demonstrated indicates that the MSMEs have profited from the financed investments, under the terms of the available subsidy. (Sustainability rating: 2)

Having considered all the foregoing risks and effects, we have arrived at an overall evaluation of the project's developmental impact as good. Overall rating: 2).

**General conclusions and recommendations**

Lines of credit for environmental purposes are a useful ancillary measure in the pursuit of national environmental ambitions. If appropriate legal incentives are lacking, the financing of profitable environmental investments, each economically viable on its own merits, presents an opportunity for the financial sector to contribute to the furtherance of environmental protection. This project has shown that this is only possible by developing model investments (with the potential for standardisation where appropriate), and implementing simultaneous measures to inform and advise.

In order to encourage customer responsibility in the achievement of the environmental effects being pursued, and to raise their awareness on the seriousness of the subject, quantifiable environmental benefits should form part of the individual credit agreement with the borrower.

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

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

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

A rating of 1 to 3 is a positive assessment and indicates a successful project while a rating of 4 to 6 is a negative assessment and indicates a project which has no sufficiently positive results.

**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
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. A rating of 1 to 3 indicates a “successful” project while a rating of 4 to 6 indicates an “unsuccessful” project. In using (with a project-specific weighting) the five key factors to form an overall rating, it should be noted that a project can generally only be considered developmentally “successful” if the achievement of the project objective (“effectiveness”), the impact on the overall objective (“overarching developmental impact”) and the sustainability are considered at least “satisfactory” (rating 3).