Measuring outcomes, assessing results, learning for the future

ELEVENTH EVALUATION REPORT ON PROJECTS AND PROGRAMMES IN DEVELOPING COUNTRIES 2009–2010

kfw
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CONTENTS

SPOTLIGHT

A group of people in Benin: assessing results together

Evaluation

The systematic and objective assessment of an on-going or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors.

Evaluation also refers to the process of determining the worth or significance of an activity, policy or programme. An assessment, as systematic and objective as possible, of a planned, on-going, or completed development intervention.

Glossary of key terms in evaluation and results based management – OECD 2009

PREFACE

Barely any policy field is and has been evaluated as intensively and for such a long time as development cooperation – this is the emphatic response that I like to give to its critics. The present report provides a succinct overview of the projects and programmes of Financial Cooperation from the past two years that were evaluated by means of representative samples. It shows that we are very much on the right track. At the same time, the report highlights those areas where we have some room for improvement.

In order to have our development cooperation evaluated from an entirely independent standpoint in the future, we are currently in the process of establishing a new evaluation institute. This institute will provide information on the effectiveness, efficiency and sustainability of all the policies and projects for which the Federal Ministry for Economic Cooperation and Development (BMZ) is responsible. As the ministry in charge of development cooperation, we require more independent and comparative evaluations across different implementing agencies. This is what the new institution is designed to do. It will for instance review the suitability of innovations before scaling them up. And it will put proven instruments to the test. Yet it will also assess whether we might perhaps achieve the same results at lower cost. The implementing organisations KfW Entwicklungsbank and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) will continue to evaluate the success of the projects and programmes they implement and report these findings to BMZ.

Proving what yields results and what does not is anything but easy. How many people have remained healthy because waterborne diseases were prevented by the new wells we financed? That is one of the complex issues that are dealt with by the BMZ-funded impact analyses quoted in this report. In order to reliably investigate and demonstrate the links involved, we require further scientific expertise – which is another reason why we are establishing the new evaluation institute.

Not least, the new institute will support the development of evaluation capacities in our partner countries. Strengthening good governance and ownership are among the key elements of German development policy.

By setting up a separate institute, we will be placing the evaluation of German development cooperation on an even more independent and broader footing in the future. We are aware of the fact that the results will not always be convenient. We will face up to these tests in order to manage our development cooperation even more effectively and efficiently in the future.

Dirk Niebel
(Federal Minister for Economic Cooperation and Development)

Dirk Niebel

AT A GLANCE

Measuring outcomes

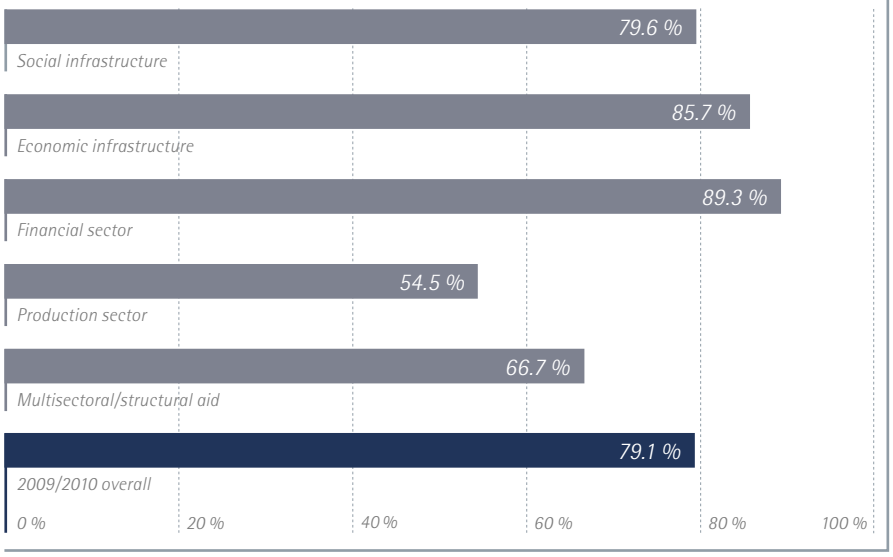
For 2009/2010

Total survey population of 215 projects, 111 of which were drawn into the samples

139 ex post evaluations covering a volume of funds of EUR 1,525 million, plus participation in rigorous impact studies

Assessing results

Success rates (sectors and overall) by number in 2009/2010 (in %)



Learning for the future

Cross-cutting evaluations – an instrument for institutional learning

In 2009/2010 we conducted cross-cutting analyses of the evaluation portfolio for the following thematic areas:

- Social marketing
- Decentralisation
- Financial sector
- Energy

FOREWORD

Reducing poverty, improving the living conditions in our partner countries. These are the outcomes that development cooperation interventions aim for. Were the set objectives achieved? How can results be improved in the future? Evaluation provides answers to these questions.

The German Government's decision to establish an independent evaluation institute underlines the importance it attaches to increasing the effectiveness of German aid. Indeed, greater effectiveness is one of the six priorities of Germany's new development policy. By evaluating the projects and programmes of Financial Cooperation (FC), we aim to provide a solid foundation on which to base the planned expansion of the German aid evaluation system.

In this Eleventh Evaluation Report on Projects and Programmes in Developing Countries, we are presenting to the public the results of 139 FC projects that were commissioned by the Federal Ministry for Economic Cooperation (BMZ) using federal budget funds. Ever since Financial Cooperation was launched in 1961, upon completion of a project we have systematically reviewed whether the specific development objectives were achieved. For over two decades we have been providing the public with a transparent and complete report on successes as well as failures of the projects and programmes. This is how we perform our duty of accountability.

Responsibility for evaluating the results of completed individual projects has rested with our independent FC Evaluation Unit (FC E) for over ten years. This unit sends experts to partner countries to conduct on-site evaluations. These experts are either external consultants or they are KfW Entwicklungsbank staff members seconded to FC E for the duration of the evaluation. The independence of these evaluators must always be guaranteed. The individuals concerned must not have been previously involved with the project to be evaluated. Furthermore, the Evaluation Unit reviews each evaluation report in order to ensure consistency of the assessment criteria and standards of quality. Obviously, this is a costly process. Nonetheless, we are convinced that it is worthwhile, for two main reasons:

1. Quality. The quality of our work is of key concern to us. Through evaluation we uncover weak points and obtain valuable information. We use this information when designing new projects and programmes. We learn from successes – and failures – which also enables us to ensure the quality of our work going forward.

2. Institutional learning. Evaluation requires an independent perspective, but at the same time also calls for a deep understanding of practical issues. One of the leading minds in the field of evaluation once put it very well: "independent, but not detached". An involvement that enables the evaluator to understand, without making him or her biased, creates an ideal environment for the communication of lessons learned. One instrument of learning that has become indispensable for us is the FC-specific model of in-house secondment. This is inspired by the idea of the "peer review", a model practised successfully in many fields. Staff members seconded to FC E gain new insights as they switch from the ex ante perspective of the planning and implementation practitioner, to the ex post perspective of the evaluator. They are then able to put these insights to use in their own work, and in day-to-day exchanges with their colleagues.

Dr Norbert Kloppenburg

Our in-house FC Evaluation Unit, which operates independently of the FC projects and programmes, but is not detached from them, is a component of our quality assurance and of German development cooperation's evaluation system. We look forward to close cooperation with the planned evaluation institute, and to learning even more about the causes of success and failure both with and from it.

Dr Norbert Kloppenburg
(Member of the Executive Board of KfW Bankengruppe)

AREAS OF EVALUATION

FOCUS ON RESULTS

Evaluating development cooperation has received more and more attention in recent years. This came about in the wake of the adoption of the UN Millennium Development Goals (MDGs) in 2000 – most notably to halve extreme poverty worldwide by the year 2015 – which kindled a renewed interest in measurable development results. The focus began shifting away from the available monetary funds towards the results to be achieved. With the aid effectiveness agenda launched at the Paris Declaration of 2005, the participating states agreed on five partnership commitments for effective co-operation. One of these commitments is "managing for results", which refers to the management and implementation of aid "in a way that focuses on the desired results and uses information to improve decision-making".[1] Accordingly, strengthening aid effectiveness is one of the German Government's six development-policy priorities.

A winegrower in Georgia: hands-on results that can be measured

As we approach 2015, the issue of achieving the MDGs is viewed with increasing urgency. This is where evaluation makes an important contribution. It can provide an account of what has been achieved so far, and help us understand "what generates results, how, and why". Evaluation thus supports learning for ongoing and future projects.

This increasing focus on results has gone hand in hand with the refinement of evaluation instruments. This is also reflected in the present eleventh report on the evaluation activities and evaluation results of the Financial Cooperation (FC) interventions that were commissioned by the German Government.

Evaluation of individual projects: standard ex post evaluation

The activities of the FC Evaluation Unit (FC E) are centred on FC projects and programmes, the results of which are assessed in a standard ex post evaluation two to three years after their completion. Until 2007, the entire FC portfolio was subject to this kind of ex post evaluation. Today, we limit ourselves to evaluating a representative sample of projects and programmes. The sample is large enough to permit reliable conclusions on the development results of all completed FC interventions (around 50 % of projects and programmes).

A standard ex post evaluation involves a rapid appraisal approach, in which proven qualitative evaluation methods are increasingly supplemented by quantitative methods, available funds permitting. The results for the total of 139 ex post evaluations of this type, and the success rates for all projects, are presented and discussed in the following sections entitled "Significant success rate" and "Robust outcomes – Results for 2009/2010".

[1] Paris Declaration on Aid Effectiveness (2 March 2005, p. 10).

In-depth analyses: impact evaluation

In selected cases, the evaluation of individual projects and programmes digs deeper into the question of impact than a standard evaluation. In these cases, primary data is collected – which at times can be rather complex and costly – and then analysed using empirical statistical methods with the aim of conducting a rigorous impact evaluation. The effects of a development project are isolated by comparing changes in the living conditions of the target group with those for a control group. Ideally, the only difference between the two groups will be that one has benefited from the project, while the other has not. Our experience with impact measurements of this kind in 2009/2010 is described in the section entitled "Under the magnifying glass – Taking a closer look at the results chains of selected projects". The examples of data collected specifically for impact measurement are primarily taken from the water sector (Yemen and Benin). Both studies were conducted with partners, with a leading role being played by the BMZ Division for Evaluation of Development Cooperation.

In the future, instead of collecting primary data for the purpose of impact measurements, we will aim at making greater use of data already available from our partners, such as the Demographic and Health Surveys (DHS) and the Living Conditions Monitoring Surveys (LCMS). This approach has already been tested by FC E in Zambia (see p. 30).

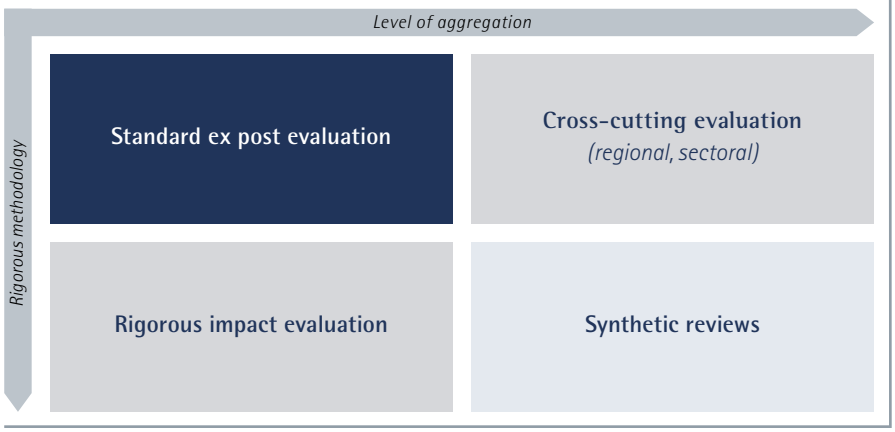
Looking at the bigger picture: cross-cutting evaluation

No matter how deep the analysis may be, the lessons learned from the evaluation of a single project can only be limited, because the question always arises of whether this is just a one-off experience, or whether the result is of broader significance. This is why cross-cutting analyses of the evaluations of similar project types are particularly important. Given the large number of individual evaluations conducted by FC E since its inception and hence its extensive portfolio of evaluations, FC E is able to carry out such cross-cutting evaluations. Analyses of this kind – in the fields of decentralisation, energy, social marketing and financial sector promotion – are covered in the section on evaluation results and in the special chapter on the financial sector.

Rigorous and systematic: synthetic reviews

In order to establish whether the results measured in rigorous impact measurements can be transferred to other regions, countries or cultural contexts, meta-analyses – so-called "systematic" or "synthetic reviews" – can be conducted. A precondition for such a review is that internationally a sufficient number of rigorous evaluations are available for a specific project type, such as rural drinking water supply. FC E has not yet participated in this kind of activity, but the rigorous impact studies in which FC E is involved are improving the basis for synthetic reviews.

Areas of FC evaluation work



SIGNIFICANT SUCCESS RATE

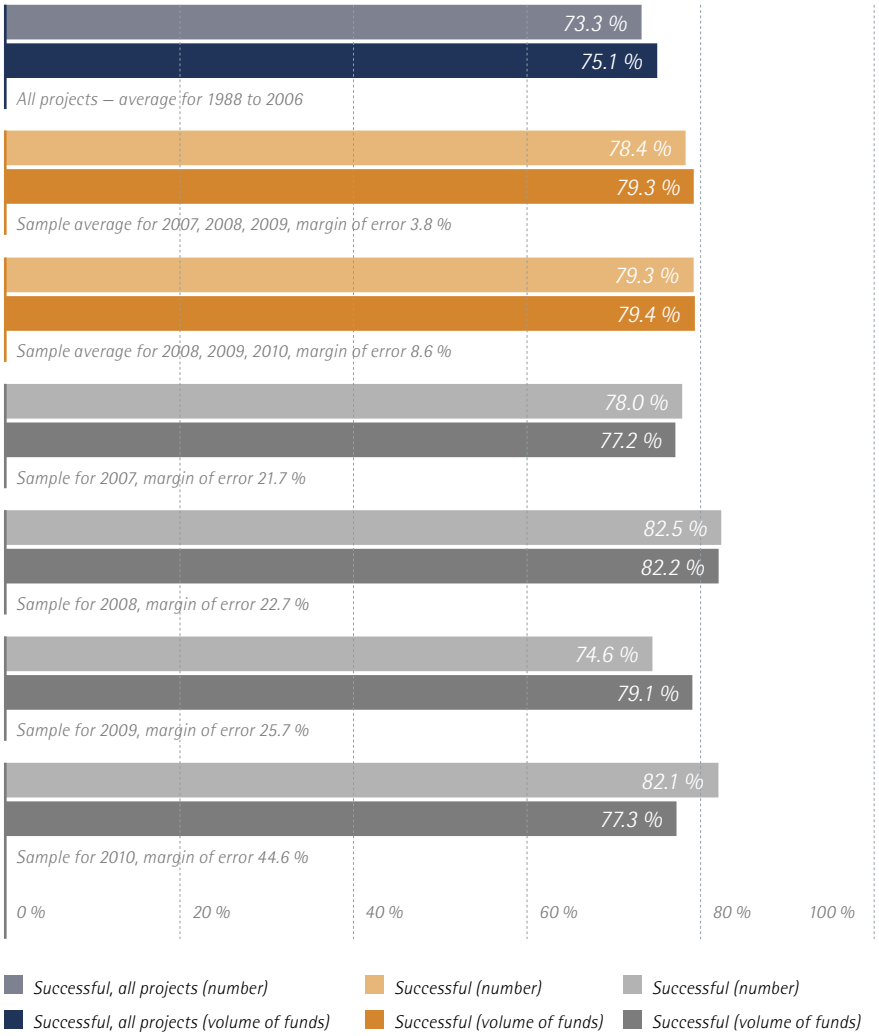
RESULTS FOR THE 2007–2010 SAMPLES

How many Financial Cooperation (FC) projects were successful? And how many did not achieve their development objectives? For more than 20 years KfW Entwicklungsbank has been evaluating FC projects and programmes and presenting the results to the public. Since 2007 the success rate has been calculated on the basis of a random sample of projects completed in a given year. Up until then, all projects were evaluated. The results of the sample are representative for all projects completed in that year, but as with all sample statistics they are subject to a margin of error. If the projects of several years are aggregated, this margin of error can be reduced considerably. In other words, the accuracy of the sample increases with the number of projects it contains. For the first time, this evaluation report aggregates the results of samples taken over two periods of three years each: 2007 to 2009, and 2008 to 2010. This reduces the margin of error to below 5 %, placing the comparison of success rates with the years 1988 to 2006 on an even sounder footing. For the 2008 to 2010 period, however, a slightly higher margin of error must be assumed, since for the reporting period of 2010 out of the 50 projects to be evaluated, 22 evaluations are still on-going.

A high level of success

For the first cumulative sample, which covers the years 2007, 2008 and 2009, the success rate by number of projects and volume of funds (budget funds committed by BMZ) reached 78.4 % and 79.3 % respectively, which was slightly higher than the average success rate between 1988 and 2006. The initial results for the success rate by number of projects in the cumulative sample for 2008 to 2010 suggest a similar outcome. In both cumulative samples, the success rate by volume of funds remains virtually unchanged at 79.3 % and 79.4 %.

Comparison of long-term success rates



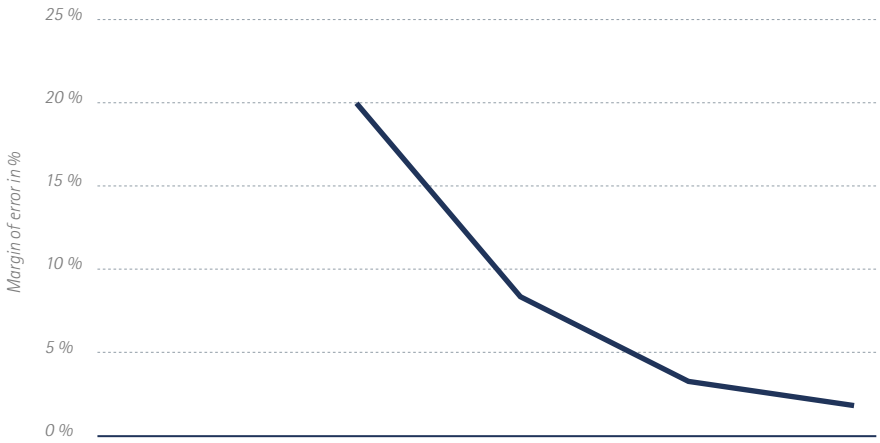
To find out how we calculated the margin of error, go to: http://www.kfw-entwicklungsbank.de/ebank/EN_Home/Evaluation/index.jsp.

Increasing accuracy

The sampling methodology is designed to ensure that the outcome is representative for all projects. The more samples aggregated across the years, the more accurate the result, as the margin of error falls. Since the sampling method was first used in 2007, 230 out of a total of 441 projects ready for evaluation had been included in the samples up to 2010, i.e. more than 50 % of the total.

Statistical calculations show that when samples from two years are combined, a margin of error of below 10 % is achieved. Thanks to the large number of projects they contain, cumulative samples covering a period of three years permit conclusions about the total population of completed projects with a margin of error of less than 5 %. This is the level of significance conventionally recognised by scientists.

As the sample grows, so does the accuracy (margin of error in %)



Aggregated years	*2007*	*2007/2008*	*2007–2009*	*2007–2010*
No. of projects in the sample	*61*	*119*	*180*	*230*
No. of projects in the total population	*116*	*226*	*345*	*441*

The importance of randomisation

If a sample is to permit truly representative conclusions concerning the total population of projects from which it is drawn, the sample selection must be randomised. This is the only way to rule out systematic distortions that inevitably arise for instance when evaluators focus on particularly large or particularly promising projects.

With the appropriate methodology, the anticipated margin of error can be reduced significantly even if the sample size is small. To this end, the projects that are ready for evaluation are grouped into specific categories or strata on the basis of predefined criteria (a process termed "stratification"). Criteria may be regions, sectors or the volume of funds used. Stratification is optimal when the strata are as homogenous as possible within themselves (internal homogeneity), and at the same time as mutually heterogeneous as possible (external heterogeneity).

Analyses of the FC evaluation portfolio show that internal homogeneity in conjunction with external heterogeneity is best achieved for the criterion "sector". The projects to be evaluated for a year are therefore broken down into the sectors education, health, water, finance, energy, transport, agriculture/resource protection, and multisectoral projects. A sample is then drawn from each of these strata on a randomised basis. If the number of projects contained in the population is even, precisely half the projects are included in the sample. If the number is odd, slightly more than half are included.

JOINT EVALUATION, JOINT LEARNING

GUEST ARTICLE BY GIZ: VOCATIONAL TRAINING IN THE PHILIPPINES

Guest article by Martina Vahlhaus, Director of the Evaluation Unit at Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

GIZ and KfW work together – and that includes evaluation. Since 2008, GIZ's forerunner organisations (GTZ[1], DED[2] and InWEnt[3]) have been conducting two to three independent evaluations a year together with KfW Entwicklungsbank. For these evaluations, KfW and GIZ choose from among all cooperation projects of both organisations. The criterion for selection is that the programmes are closely interlinked. Joint evaluation and joint learning promise to deliver insights that neither organisation can obtain on its own.

Students at a technical vocational school in the Philippines: learning together

The ex post impact assessment of the "Dual Vocational Training" project in the Philippines was the first time a programme had been evaluated in which all three of GIZ's forerunner organisations were involved. KfW and GIZ commissioned this evaluation together and it was completed in 2010. Rather than looking at the contributions separately, the evaluation studied their joint impact.

The question to be answered was: based on the OECD-DAC evaluation criteria, what was the outcome of the German contribution to the vocational training sector in the Philippines during the period 1996 to 2007? These contributions were designed to support the capacity development of the Technical Education and Skills Development Authority (TESDA) and selected training institutions in the Philippines to help introduce dual training courses countrywide by generating visible effects to be replicated, thereby improving the professional situation of graduates of vocational training institutions.

The evaluation team relied on a sophisticated mix of methods, which included rigorous impact measurement. This method aims to attribute impacts to the measures as precisely as possible. Since GIZ and KfW aimed to learn together from the results, it seemed particularly worthwhile investing in hard evidence. Tracer studies, comparative statistical analyses of graduates of participating and non-participating institutions as well as online surveys of former participants in train-the-trainer activities all formed part of the evaluation programme.

The evaluation found that good results were achieved in the participating organisations. By delivering training and consultancy as well as improving resources, the project helped raise the administrative efficiency of the training institutions, develop the teaching skills of the teaching staff and improve the qualifications of the trainees. The latter group were able to find a job more quickly and earn more money than comparable individuals.

The evaluation also showed however that the vocational training system had not yet undergone the structural change required to be able to implement a dual training approach. TESDA had not yet emerged as a change agent capable of disseminating the lessons learned.

This learning experience taught all organisations involved a great deal, especially considering the fact that the promotion of vocational training in Germany's partner countries will continue to play an important role in the future. In similar projects in the future, KfW and GIZ will consider during the planning phase who else can also be involved as a change agent when initiating structural reforms. The evaluation recommended better cooperation with the private sector, as businesses have a legitimate interest in improving the training and qualifications of their workforce.

[1] GTZ (Gesellschaft für Technische Zusammenarbeit)
[2] DED (Deutscher Entwicklungsdienst)
[3] InWEnt (Internationale Weiterbildung und Entwicklung)

ROBUST OUTCOMES

RESULTS FOR 2009/2010

In 2009 and 2010 a total of 139 projects were evaluated. The total volume of funds, i.e. the budget funds allocated by BMZ to finance the evaluated projects and programmes, amounted to EUR 1.525 billion. Applying the OECD-DAC evaluation criteria, in terms of use of funds 79.3 % of this volume of funds was rated a success (overall rating: 1 to 3 on a scale from 1 to 6). For this reporting period, there was a clear tendency for projects and programmes to be rated as "good" (a rating of 2). This attests to robust outcomes.

For those measures classified as unsuccessful, there was a continued trend towards "unsatisfactory". Almost all unsuccessful projects received a rating of 4, i.e. were found to be "unsatisfactory, despite some positive results". As in the previous reporting period, none of the projects was rated as being a complete failure (a rating of 6). For the projects and programmes evaluated in 2009 and 2010 this meant an average rating of 2.7 for overall success.

Five OECD-DAC evaluation criteria: projects fare less well on efficiency and sustainability

With regard to the OECD-DAC evaluation criteria, as in previous years the best result was achieved for relevance, with an average score of 2.22 (median score: 2). There are reasons why ratings below 3 rarely occur in this category: a score of 4 or less for relevance would indicate that a project's design and its impact chain were unconvincing – a shortcoming that is usually already discovered during the appraisal phase.

Ex post evaluation 2009/2010 – Results

		Number of projects		*Volume of funds*	
Performance	*Rating*	*Absolute*	*In %*	*Absolute**	*In %*
Very good	*1*	*7*	*5.0*	*150.8*	*9.9*
Good	*2*	*63*	*45.3*	*734.3*	*48.1*
Satisfactory	*3*	*40*	*28.8*	*324.4*	*21.3*
Successful	*1-3*	*110*	*79.1*	*1,209.5*	*79.3*
Unsatisfactory despite some positive effects	*4*	*28*	*20.1*	*302.0*	*19.8*
Inadequate	*5*	*1*	*0.7*	*14.0*	*0.9*
Failed	*6*	*0*	*0.0*	*0.0*	*0.0*
Unsuccessful	*4-6*	*29*	*20.9*	*316.0*	*20.7*
Total	*1-6*	*139*	*100.0*	*1,525.4*	*100.0*

** In EUR million*
Any differences in totals are due to rounding.

Effectiveness and impact achieve the second and third best results among the five evaluation criteria, with average scores of 2.55 and 2.43 respectively.[5] The fact that scores for these two criteria follow a similar[6] trajectory is based on an inherent logic. Although effectiveness and impact concern different segments of the results chain, both criteria are about achieving development objectives. If a project's outcome objectives are achieved (effectiveness), there is a high probability that this will contribute to positive impacts. If, on the other hand, a project's objectives are not achieved to a satisfactory degree on the outcome level, the project is highly unlikely to generate a significant overarching development impact.

The critera sustainability (average score 2.83; median 3) and efficiency (average score: 2.95; median 3) obtained lower scores on average than the other criteria. Here we should note that the rating scale for "sustainability" only goes down as far as 4 (not sustainable) and not down to 6, as in the case of the other four criteria. Sustainability is a "hard" criterion which, if given an unfavourable rating, automatically leads to an overall rating of the project as "unsuccessful".[7] A project is awarded a good sustainability rating if it generates positive results that are judged to be lasting in a given context.

Unlike sustainability, efficiency is not a hard criterion. Even if it receives a score of less than 3, a project can still receive an overall rating of "successful". The rationale for this is not based on the true significance of the criterion efficiency, though. On the contrary: if evaluation in practice was actually able to meet the standards set by the OECD-DAC definition and evaluation questions concerning efficiency[8], this criterion would be the most important one. According to the OECD-DAC, the efficiency criterion is not only about evaluating the production efficiency, i.e. whether the ratio of project outputs (classrooms, kilometres of water pipes and so on) to financial inputs is an appropriate one. Far more important is the allocation efficiency of development funds measured by a favourable ratio of results to funds employed. The flow of results is comprised of the project outcomes (i.e. effectiveness) and impacts, and their sustainability. The allocation efficiency can only be judged properly when this flow of results is considered in relation to the inputs provided, and the ratio obtained is then compared with other alternatives for achieving the same result (alternatives which are either more costly, leading to a positive efficiency rating of the project to be evaluated, or less costly, leading to an unfavourable efficiency rating of the project in question).

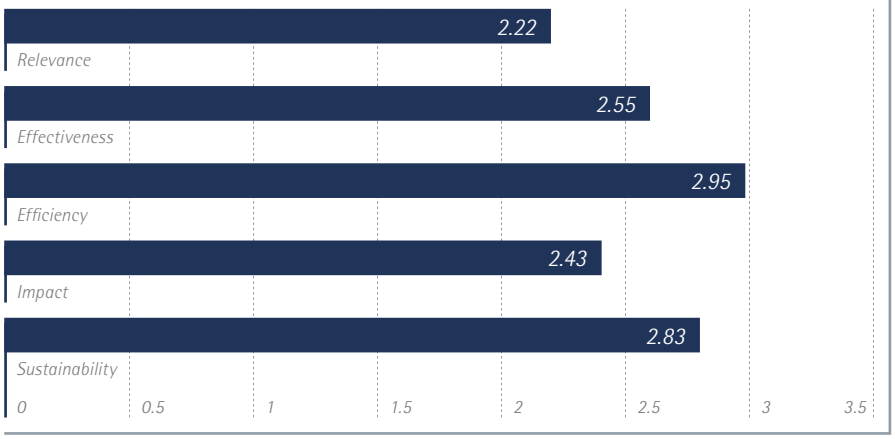
[5] The median score for both, though, is 2 – a further indication of how robust these values are. In the case of effectiveness, the distribution of values around the average score displays a standard deviation of just over 1, which is particularly high by comparison with the other criteria. In other words, the average deviation from the average score is one point up or down on the rating scale.

[6] This is corroborated by the close correlation of 0.697 between the scores for these criteria.

[7] The correlation between a sustainability score of 4 and the judgement "unsuccessful" is almost entirely positive, i.e. is close to 1.

[8] For a brief explanation of the various OECD-DAC criteria please refer to the annex (p. 46–47) or visit the DAC website at http://www.oecd.org/dac/.

Project evaluation by sub-criteria (Ex post evaluations 2009/2010)



The key question in development cooperation

Assessing allocation efficiency raises the key question for development cooperation: are the maximum results being achieved per unit of funds? It is not easy to answer this question, as was impressively demonstrated in a recent study on efficiency commissioned by the BMZ Evaluation Division.[9]

Practitioners have to work with circumstantial evidence. Even though meaningful information is provided, it rarely delivers unequivocal answers. This is one reason why when efficiency is rated, often all those critical points are raised that, although documented as weaknesses of an evaluated project, do not lead to its failure. It therefore comes as no surprise that although efficiency correlates closely with effectiveness, impact and sustainability, scores for this criterion on average fall below scores for the others.

A good database is crucial

An overall trend toward the inclusion of more quantitative data in the evaluation process is evident. This improves the database and allows for a more differentiated and accurate rating, because interventions can be rated more precisely when quantitative data and proven benchmarks based on defined reference values are available. However, if an intervention aims to facilitate developments that are particularly difficult to measure, as is the case with interventions designed to stabilise state structures or promote decentralisation, it is more difficult to achieve precision. The same applies to innovative projects in which reliable benchmarks are not yet available, as well as to an intervention whose database is incomplete.

[9] Palenberg, M. A. (2011): Tools and Methods for Evaluating the Efficiency of Development Interventions, BMZ Evaluation Division: Evaluation Working Papers, Bonn.

Success by sector

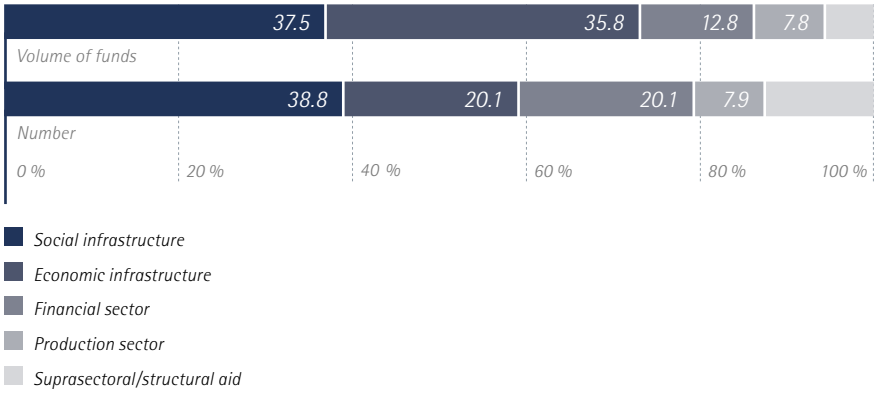
In terms of both absolute numbers and volume of funds, the 2009/2010 portfolio was dominated by projects in the social infrastructure sectors. These included projects for health and education, water supply and sanitation/solid waste management, and interventions focusing on governance and civil society, for instance to promote decentralisation. Among the projects and programmes evaluated in the field of social infrastructure, interventions for water supply and sanitation/solid waste management accounted for the largest volume of funds. These traditionally form a focal area of German FC, and usually involve the construction of complex infrastructure.

The sectoral breakdown by volume of funds and number of projects and programmes for 2009/2010 remained virtually unchanged from previous years. Major differences between sectors are observable in terms of average project size. In economic infrastructure, investment-intensive interventions in the energy and transport sectors meant that at EUR 19.5 million, the average volume of funds per project (use of budget funds provided by the German Government) was virtually twice the amount for social infrastructure (EUR 11 million).

Water sector weaker than in previous years

During the reporting period under review, water supply and sanitation/solid waste management was among the less successful sectors. The positive result presented in the Tenth Evaluation Report was not repeated. The criterion that often led to an unsatisfactory rating for specific projects within this sector was insufficient sustainability. Efficiency was also rated negatively in many cases.

Projects and programmes evaluated ex post in 2009/2010, by sector (in %)



Berlin: conference participants discussing evaluation results in the water sector

Conference on water and evaluation in 2010

Our results in the water supply and sanitation sector were confirmed and supplemented by the findings of a conference initiated in 2010 by the Evaluation Unit of KfW Entwicklungsbank and the Independent Evaluation Group (IEG) of the World Bank. Performance-based management structures, the introduction and promotion of which in the urban water sector is now state-of-the-art, have a positive effect on the maintenance of infrastructure, reduction of water losses, billing and collection rates (i.e. the percentage of bills that are paid). Tariff levels, however, which are dependent on the sector policy in the partner country, are often an obstacle to full cost recovery. As far as development policy for this sector is concerned, a certain re-evaluation of the call for full recovery of costs from the consumer is evident, not least as a result of the UN resolution of 2010, which declared "clean water" to be a human right. However, the government must then be willing to cover the shortfall in revenues by providing subsidies, otherwise the sustainability of water supply will be jeopardised. A further obstacle to the development impact of water projects, especially in rural areas, are hygiene practices affecting drinking water that is clean at the source – a finding that is substantiated by more recent rigorous impact studies (see the section below entitled "Under the magnifying glass – Taking a closer look at the results chains of selected projects"). Major challenges also remain in the sanitation sector. Furthermore, all participants at the conference were unanimous in the view that climate change is severely affecting the water sector, and will continue to do so. The example of water supply in water-scarce Yemen (once again, see "Under the magnifying glass") is already giving cause for alarm. Integrated water resource management will be more important in the future than ever before.

Social infrastructure weaker overall

Compared to the last report, overall results for social infrastructure were significantly weaker – and not just as a result of the water sector. One striking feature is the low success rate in the health sector. This was mainly due to the failure of a single intervention to improve the health system in a province of Indonesia, which was of above-average size in terms of the volume of funds. This programme failed on no less than three criteria: unsatisfactory efficiency, an unsatisfactory contribution toward improving the health status of the population (impact), and poor sustainability.

Supportive measures in the reproductive health sector, which aim primarily to raise public awareness and prevent HIV/AIDS (through social marketing), were all rated as successful, however. This result looks quite different from the success rate during the last reporting period, which was just below average. A cross-cutting evaluation on social marketing projects conducted by the FC Evaluation Unit shows that results for this segment have been above the average for all projects for many years. Nonetheless, here too efficiency is a criterion that often receives a negative rating. The efficiency of projects that are designed to change sexual behaviour is particularly difficult to evaluate, however. Given such a qualitative target, how significant is the information provided by the quantitative indicators of efficiency that are standard in this sector for contraceptives, such as costs per Couple Year of Protection?

Success rates by sector (volume of funds)

Sectors	*Number*	*Volume of funds**	*Successful**	*Success rate*
Social infrastructure	*54*	*571.9*	*438.0*	*76.6 %*
– Education	*6*	*60.1*	*53.3*	*88.7 %*
– Health care	*10*	*37.6*	*24.8*	*66.0 %*
– Population policy/programmes and reproductive health	*7*	*32.4*	*32.4*	*100.0 %*
– Water supply and sanitation/ waste management	*25*	*379.5*	*265.2*	*69.9 %*
– State and civil society	*3*	*45.1*	*45.1*	*100.0 %*
– Other social infrastructure and services	*3*	*17.2*	*17.2*	*100.0 %*
Economic infrastructure	*28*	*545.8*	*483.4*	*88.6 %*
– Transport and storage	*13*	*315.3*	*289.7*	*91.9 %*
– Communications	*0*	*0.0*	*–.–*	*–.–*
Energy generation and supply	*15*	*230.5*	*193.7*	*84.0 %*
Financial sector	*28*	*195.2*	*172.4*	*88.3 %*
– Finance	*27*	*192.6*	*169.8*	*88.2 %*
– Trade and tourism	*1*	*2.6*	*2.6*	*100.0 %*
Production sector	*11*	*118.6*	*40.5*	*34.1 %*
– Agriculture, forestry and fisheries	*11*	*118.6*	*40.5*	*34.1 %*
– Manufacturing, natural resources and mining, construction	*0*	*0.0*	*–.–*	*–.–*
Suprasectoral/structural aid	*18*	*93.9*	*75.3*	*80.2 %*
Total	*139*	*1,525.4*	*1,209.5*	*79.3 %*

** In EUR millions*
Any differences in totals are due to rounding.

"Hard sectors" particularly successful

Concerning the distribution of success by sector, interventions in the so-called hard sectors, which on average are of large volume, display a particularly high success rate. In the transport sector, projects designed to develop and modernise road transport in Namibia proved to be especially successful. Interventions to promote rail transport in China also emerged as beacon projects, because – thanks not least to their model character – they are helping promote a more climate-friendly development of the transport sector far beyond the narrow boundaries of the actual projects themselves.

The energy generation and supply sector also shows a high success rate of 84 %, by volume of funds. Success rates in this sector have, however, been fluctuating over time. One possible explanation for this is offered by the cross-cutting evaluation of the energy sector conducted by the FC Evaluation Unit, which analysed factors for the success and failure of 255 projects and programmes between 1988 and 2010. Interventions that failed included primarily those with an exceptionally long project duration, which corresponds with a higher probability of concepts becoming outdated. Perhaps even more significantly, when project risks had already been classified as high at project appraisal they tended to fail more often. This pattern was also confirmed in the reporting period under review, in which two out of the three interventions classified as unsuccessful had already been identified as involving high or very high risks at the point of launch.

The comparatively low success rates by volume of funds in the agriculture, forestry and fisheries sector is striking. Although this sector accounts for only 7.8 % of all interventions evaluated ex post, the result for the sector did have a notably negative effect on the average rating of the overall sample. In agricultural and forestry interventions which were large by volume of funds, unsatisfactory sustainability was the key factor for being rated as unsuccessful.

In the financial sector the success rate by volume of funds for this reporting period remained significantly higher than the average for all measures, though it was somewhat lower than the extraordinarily good result achieved in the previous reporting period. These results are discussed in greater depth in the "Feature: Financial sector" section (see p. 32 ff).

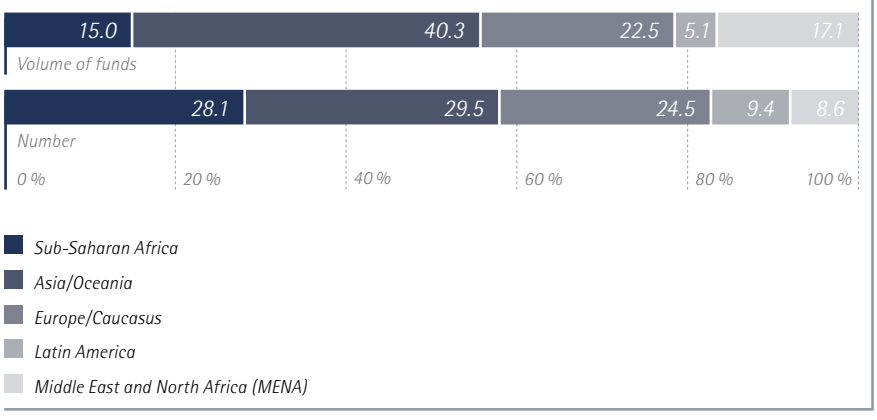
Success by region

From the regional perspective, the evaluation portfolio for Asia/Oceania grew significantly in relation to previous years in terms of number and average volume of funds (federal budget funds) of evaluated projects. This was particularly striking in contrast to the Sub-Saharan Africa region where a similar number of interventions were evaluated, though these were significantly smaller in terms of their volume of funds. The average figure was approximately EUR 5.85 million, which was roughly half the average project size (volume of funds) for the 2009/2010 evaluation portfolio. By contrast, the evaluated projects and programmes in Asia/Oceania and the MENA (Middle East and North Africa) region were comparatively large. These were to be found mainly in the transport and infrastructure sector, as well as in the water supply and sanitation sector.

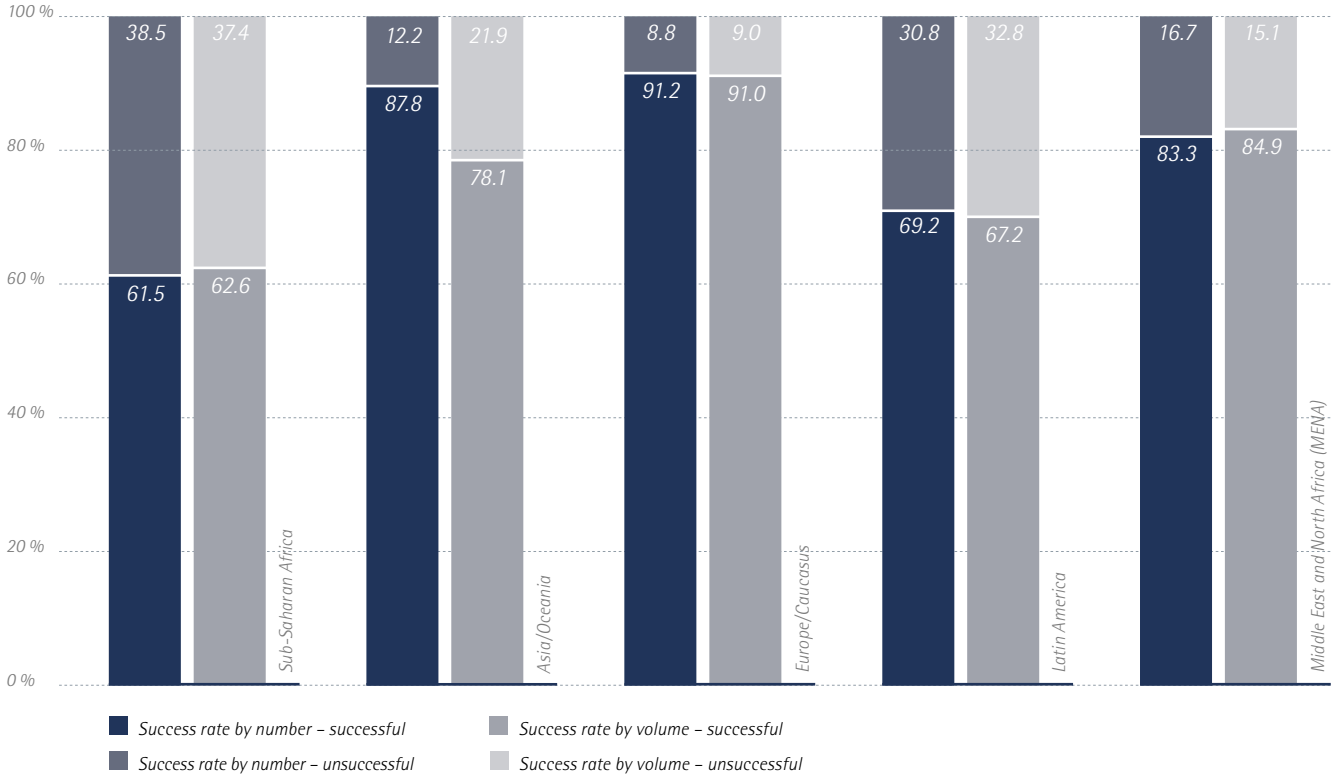
As in previous years, Sub-Saharan Africa trailed behind somewhat in terms of its success rate (by number), achieving a figure of 61.5 %, while Europe (91.2 %) and Asia/Oceania (87.8 %) led the way. This "Africa effect" is to be explained largely by the differences in development status of countries in the respective regions. The lower a country's development status – measured for instance by per capita income and average life expectancy – the more difficult and riskier development cooperation becomes. This makes it all the more important, though, that we do not allow our efforts to slacken.

The differences in success rates by region once again demonstrate: lessons for the future can be learned from previous failures. But these negative experiences do not necessarily prove that work was poor, and they certainly do not permit the conclusion that comparable interventions should not be repeated. Likewise, success stories can teach us what does bring results if we manage to distinguish between those drivers of success which a project is designed to influence, and surrounding conditions which exist for any project, although these may well be pivotal for its success. In other words, evaluation results must always be interpreted with adequate care.

Measures evaluated ex post in 2009/2010, by region (in %)



Results of ex post project evaluations in 2009/2010, by region (in %)



	Success by number		Success by volume*	
	successful	unsuccessful	successful	unsuccessful
Sub-Saharan Africa	24	15	143.0	85.4
Asia/Oceania	36	5	479.8	134.6
Europe/Caucasus	31	3	312.5	30.9
Latin America	9	4	52.4	25.6
Middle East and North Africa (MENA)	10	2	221.8	39.6

** In EUR millions*
Any differences in totals are due to rounding.

BRAZIL: DEFORESTATION SUSTAINABLY REDUCED

PROJECT RESULTS GREATLY SURPASS EXPECTATIONS – RATING "1"

Though they are far less a focus of public awareness than the Amazonian rainforest, Brazil's coastal forests are among the most threatened ecosystems in the world. Only just over a quarter of the rainforest that once existed along the Atlantic coast remains. Nonetheless, this remaining area of forest is of extraordinary global importance as a biodiversity hotspot that can help mitigate climate change and preserve biological diversity. Furthermore, these coastal forests also stabilise water supply to the neighbouring cities of São Paulo and Rio de Janeiro.

Even though less than one tenth of the original forest area is left, the federal state of Minas Gerais is still home to some of the largest areas of coastal forest, albeit for the most part in very small and fragmented zones. Some 5,000 hectares of coastal forest are destroyed here every year by encroaching settlement, industrial expansion, the need for pasture land, underground and surface mining, the vigorous demand for charcoal generated by the steel industry, and forest fires. The FC project Protection of Atlantic Coastal Forests in Minas Gerais, which was implemented on behalf of the German Government in cooperation with the Brazilian Forest Service, therefore aimed to help preserve the stands that remain and enable areas that have already been degraded to recover. This project forms part of the German-Brazilian pilot programme to protect Brazil's rainforests.

In 2010, three years after the project was completed, the ex post evaluation attested to the fact that the project had achieved "very good results, which were far better than anticipated", and awarded it an overall rating of "1". The combination of monitoring and sustainable land use had the desired effect. The evaluation report noted that although "the main problem of forest destruction remains an issue to this day, it is no longer as acute as it once was – thanks not least to the project itself". In terms of specific figures this meant that by 2010 the coastal forests in Minas Gerais had shrunk not by less than five per cent, as had been targeted by the project, but even by as little as "less than two per cent". Furthermore, the number of protected areas in Minas Gerais also increased significantly. When the evaluation was carried out there were over 468 protected zones in the forests along the Atlantic coast, and in the tree and dry savannas.

The effectiveness of the FC project in Minas Gerais is also reflected by the fact that its objectives and activities have been fully integrated into Brazil's national strategy for environmental development. This has led the country to mainstream the concept of linking nature park management with measures for sustainable land use and reafforestation in the transition zones. Furthermore, the fragmented zones of remaining coastal forest in Minas Gerais have been linked up, at least partially.

The evaluation also shows that this clearly positive trend in the fight against deforestation in Minas Gerais was only possible thanks to sound and efficient public management, and a national policy that now accords high priority to forest protection, reafforestation and regeneration. The evaluation concludes that "We may now expect a further improvement in coastal forest protection, even though pressure on resources in Minas Gerais will remain high, and conflicts over land use will continue".

Park Estadual do Rola Moça in Brazil: rated "very good"

GHANA: NEW MARKETS – IMPROVED DISTRICT AUTHORITIES?

RESULT "UNSATISFACTORY" – RATING "4"

New markets with bus stations, rest areas, delivery and unloading areas, restaurants and slaughterhouses, plus ancillary infrastructure such as latrines, water supply units and waste disposal sites. Ghana's District Capitals II programme aimed to create a more conducive environment for commerce in the region, and enable district authorities to generate income of their own by levying fees. This was envisaged to benefit the overall population, i.e. around two million people, the district assemblies, producers, transport companies, and traders. The project, which was commissioned by the German Government and included contributions from both Financial and Technical Cooperation (FC and TC), provided a total of some EUR 7.5 million for 22 district capitals.

The programme also pursued the wider objective of promoting the national decentralisation process, and of strengthening local government capacities within the districts – via the material benefits generated. Without their own funds local administrations cannot discharge their mandate and certainly cannot make investments of their own.

However, when the ex post evaluation was conducted in 2010, four years after completion of the FC component, the overall result was sobering: "overall rating 4 – unsatisfactory". Revenues remained well below expectations. The project came nowhere near achieving its target of generating reserves for infrastructure maintenance of an annual 3 % of investment costs. In most cases the markets were weekly ones with limited scope for generating revenues. The fees themselves were set at a very low level. Moreover, the sites selected were not always as centrally located as the traditional, unsurfaced marketplaces.

Ghana: a market in the town of Kintampo

The limited revenue generated meant that the overarching objective of strengthening local governance capacities within the districts was also not achieved. Although the markets were an important source of income at the local level, this was not sufficient to be able to maintain or even create further municipal infrastructure, as had been hoped. Nor was there much technical or structural improvement within the district assemblies, as much of the expertise transferred was lost due to high staff turnover.

Overall, general maintenance of the new markets by the administrations was inadequate. Unless the infrastructure is properly looked after, it is extremely unlikely that it will remain in working order. Water supply units, for instance, were working at only five of the 22 markets. The fact that many of the marketplaces were not paved made them difficult to use following heavy rainfall. Only around 70 % of the new facilities were used – a result that also fell short of expectations.

The evaluation report therefore recommends adopting a different overall approach for programmes that aim to change administrative structures and develop more local infrastructure. To implement interventions of this kind successfully, local financial management – analogous to public financial management at the level of central government – would need to be modified, and other mechanisms employed for the awarding of funds. Today, incentive-based approaches that make the allocation of funding dependent on district performance are already in use in Ghana. The report concludes: "This incentive-based approach would be more conducive to the project's objective of facilitating structural results in the decentralisation process". This would also help make the markets vibrant centres of trade and thereby sources of income for the municipalities.

INDONESIA: NEW TEACHING METHODS

GOOD RESULTS, BUT RISKS FOR SUSTAINABILITY – RATING "3"

The fact that primary education in Indonesia in grades 1 to 6 is in need of reform is not due to insufficient enrolment rates. Almost all girls and boys throughout the country go to school. Furthermore, the teacher-to-pupil ratio of 1:20 is relatively low and hence rather good for an industrialising country. Yet in terms of quality the primary education system in Indonesia lags behind. In the OECD's Programme for International Student Assessment (PISA) on educational achievements, Indonesia ranked 50 out of 57 countries.

The reasons for this are manifold: inadequately trained teachers, traditional teaching methods involving blackboards and rote learning, and a lack of appropriate teaching aids. A project commissioned by the German Government, and implemented by Financial and Technical Cooperation (FC and TC), therefore aimed to help raise quality in state primary schools. The Science Education Quality Improvement Project (SEQIP) was designed specifically to improve teaching and learning in science lessons by using experimentation sets, and thus provide children with a sound basis for technical vocational training.

Indonesia: science experiments in the classroom

A total of 28,000 schools were equipped with demonstration kits for teachers. Some 19,000 primary schools also received experimentation kits for pupils and other scientific teaching aids (FC). Furthermore, the Ministry of Education was advised on introducing new elements in teacher training, and in-service teacher training was organised (TC). The total costs of the project amounted to EUR 43.2 million.

When the project came to an end in 2006, children in their final year of primary education (6th grade) on average performed 9 % better in SEQIP schools than in non-SEQIP schools. SEQIP pupils also made up a disproportionately high percentage of the participants in the annual international mathematics and science Olympics. In 2008 Indonesia even won, beating nine other participating countries including Singapore, Taiwan and Hong Kong.

Despite the fact that the teaching and learning results achieved by SEQIP were rated as "good", the project received an overall rating of "3" by the ex post evaluation mission conducted in 2008. According to the evaluation report, "although the project achieved good results, there are risks for their sustainability". Firstly, since the project was completed, teachers have no longer been trained to use the SEQIP materials. Secondly, the very expensive, high-quality materials, which cost EUR 1,200 per experimentation kit, were not in line with the financial resources of the Indonesian education sector. The SEQIP kits were unable to compete with the very much cheaper, though also inferior, competitor product.

In response to the ex post evaluation mission the Indonesian project executing agency requested German FC to support the development of alternative, lower-cost SEQIP kits. The concept behind the new materials, which includes experimentation instructions designed for pupils and teachers to study on their own, to some extent compensates for the fact that teacher training is no longer being carried out, and was already presented at a national education conference in March 2009. According to the evaluation report, "We rate this rapid and pragmatic response highly positive. It will improve the sustainability of the project".

UNDER THE MAGNIFYING GLASS:

TAKING A CLOSER LOOK AT THE RESULTS CHAINS OF SELECTED PROJECTS

Fighting poverty, improving the living conditions of those targeted – these are common impacts that Financial Cooperation is intended to achieve with its projects. Standard ex post evaluations allow for the plausible assumption that by reaching the immediate project goals (effectiveness), a contribution towards the overall development impact is made. Rigorous proof of this assumption, however, is rarely possible. The further removed the overall objective is from the actual intervention itself, and the more external influences there are on the target group, the more difficult it becomes to associate changes in living conditions precisely to that particular instrument of development cooperation. It is this knowledge gap about 'true' impact that evaluators around the world are trying to fill by applying rigorous, quantitative methods.

FC E has been able to gain some experience with such methods – in cooperation with academics and with other evaluation units, foremost with the BMZ Evaluation Division.

Let us conduct a first review of what we have learned from our involvement in these in-depth studies – with respect to the results of our interventions, opportunities to increase their impact, and the benefits and costs associated with rigorous impact evaluations.

Impact measurement – in selected cases only

This much is clear: rigorous impact evaluation is by no means an option suitable for all projects and programmes, but rather one that can be applied only to a selected few. Due to high costs and long implementation periods for these elaborate measurements, we need to focus on projects of particular interest to development cooperation which promise to yield valuable insights. In our case this involves interventions in the water supply and sanitation sector, which is a focal area of German FC both in terms of volume and in terms of the thematic issues addressed. Interventions in this sector usually have the aim of providing safe drinking water, sanitation facilities or wastewater disposal in order to improve the health status of the target group. To what extent are these health improvements actually achieved? Or are they perhaps due to other factors such as hygiene practices, which in turn are also dependent on educational levels etc.? These are issues a standard ex post evaluation can only address by making plausible assumptions. By actively engaging in the field of rigorous impact evaluation we wanted to get more thorough answers to these crucial questions.

A suitable example from the field of rural water supply was identified in Benin. Since Germany supported the programme as well as the Netherlands, the FC Evaluation Unit took part in an impact evaluation of modernised wells, operated with hand pumps, in selected districts of Benin. The evaluation mission was led by the Dutch evaluation unit IOB and the BMZ Evaluation Division. Scientists from ETH Zurich and the Free University of Amsterdam were commissioned to carry out the evaluation. As a second pilot project for impact measurement, FC projects in the field of water supply and sanitation in Yemen, again financed with BMZ funds, were examined in close cooperation with our Yemenite partners. This evaluation project was conducted by academics from the University of Göttingen. The example in Yemen seemed interesting not only because it was, as far as we know, the first rigorous impact measurement in urban water supply, but also because scarce water resources pose one of the most severe constraints to development in Yemen.

Extensive data on target and control groups are key

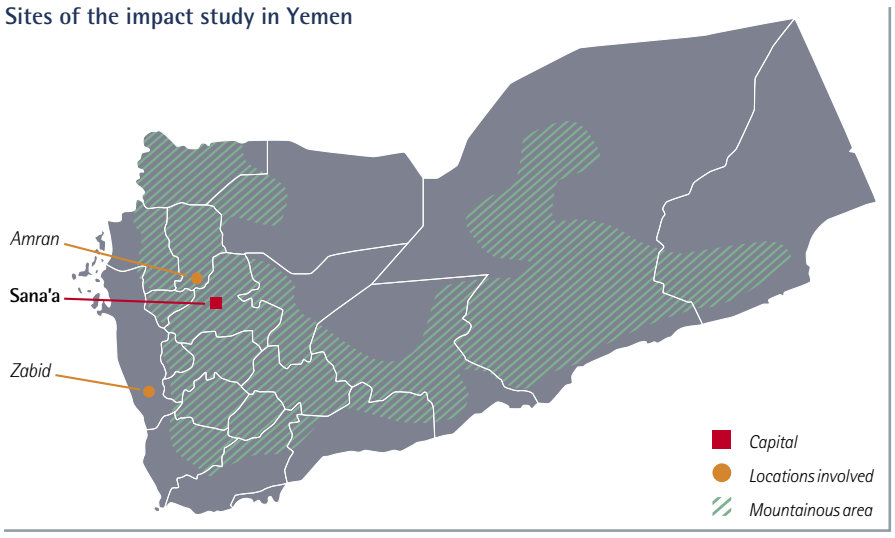
Essentially, a rigorous impact evaluation consists of a comparison between the change in living conditions of a target group – if possible before and after the intervention – and the change observed in a control group. At best, the control group should be a "twin" of the target group, the sole difference being that the control group is not subjected to a development project of the same or similar nature. A with-and-without comparison between the target and control groups, i.e. between groups benefiting from a development intervention and those not immediately targeted by it, enables evaluators to isolate the effects of the project, provided that each group is large enough to reliably filter out random factors. Consequently, target and control groups had to be identified both in Benin and in Yemen. In Benin this involved target households in villages where a new, modern water well with a hand-operated pump was planned, and control households in villages where the water supply was to be modernised at a later date. Surveys were conducted both before construction of the new wells (to obtain baseline values) and thereafter, among a total of 2,000 households (1,000 in the target group, 1,000 in the control group). In Yemen, control towns were identified that were as similar as possible to the two studied urban centres with the target groups of improved water supply and sanitation: Amran in the mountainous region and Zabid in the coastal region. A total of 2,520 households were then surveyed (1,331 in the target group, 1,189 in the control group). After running for more than two years, both impact studies are now in their final phase.

For further details on the above-mentioned analyses please refer to the publications by BMZ and IOB. Nonetheless, we can draw some initial lessons from our experiences.

Rigorous impact evaluation is not a laboratory experiment

Despite careful selection of development cooperation interventions that appeared suitable for a rigorous impact measurement, obstacles to the collection of appropriate data – some of which were unforeseen – did arise. In the case of the urban water supply intervention, it was clear from the outset that an appropriate control town needed to be found – evidently not as easy a task as finding suitable control villages in Benin. In Yemen the consultants even had an unanticipated stroke of "surveyor's luck": one of the cities studied, the city of Amran located in a mountainous area, also had a sufficiently large number of households that were not yet connected to the water mains. This allowed for comparisons not only with households in the undersupplied control city, but also with control households within Amran itself. For the other city studied, the coastal town of Zabid, only the selected control city was available, which – despite its similar topography – proved slightly different in terms of the socioeconomic composition of households. Moreover, baseline data on the situation of households were largely lacking, and data on health status drawn from hospital statistics proved rather unreliable. As a consequence the results need to be interpreted carefully. Nonetheless, the evidence now available on the impact of urban water supply and sanitation in the selected cities of Yemen is more rigorous, i.e. more reliable, than information collected in the course of other standard evaluations in this specific sector.

Sites of the impact study in Yemen

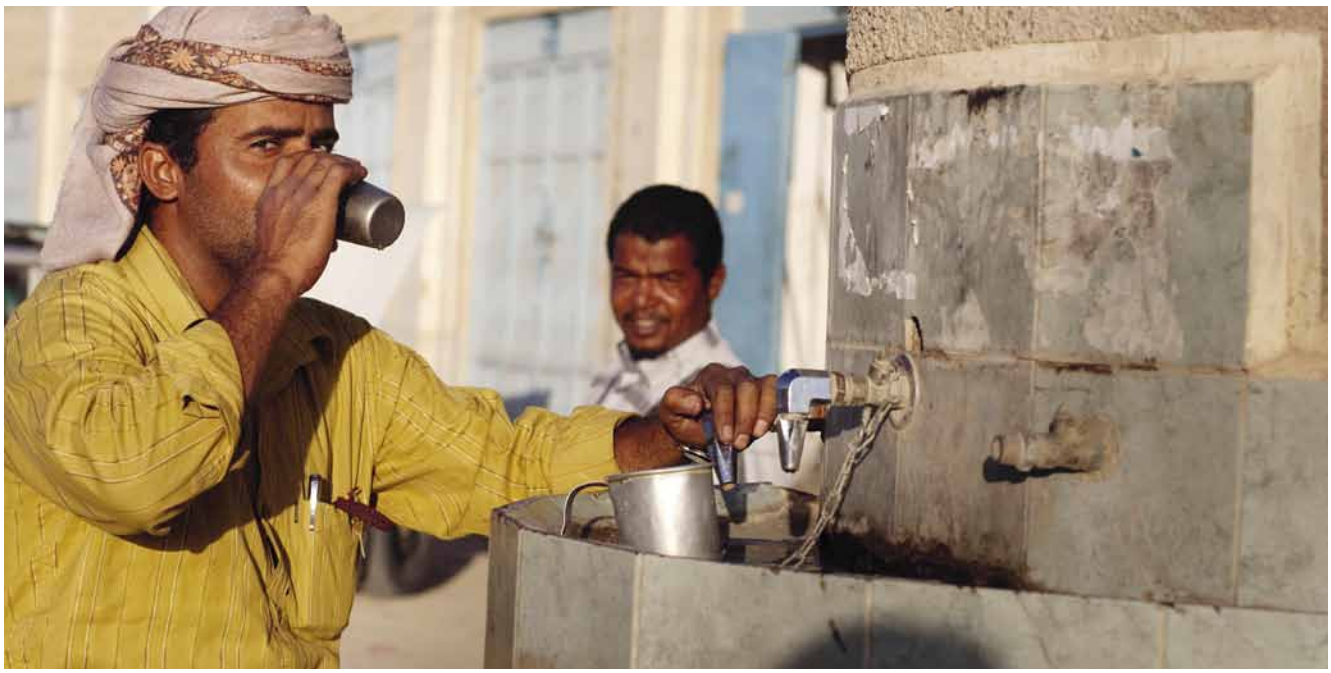


In the rural water sector rigorous impact measurement is a more common method, possibly due to the fact that target and control groups can be isolated from each other more easily. Despite the fact that data collection was extremely carefully planned, difficulties did arise in Benin as well, which highlighted that we were not dealing with a controlled experiment in a laboratory. Wells that had been planned were not built, while others that had not been planned were. As a result, data were collected from the "wrong" households. Far more frequently than had been anticipated, a new well that was built turned out not to be the first modern source of water at that location. Instead of analysing "with –versus– without access to safe drinking water", the issue addressed by the study turned into a far more complex problem: what effect do shorter queues at the well and the use of both traditional and modern water sources have on the target group? As with the case of Yemen, though, the data collected are providing information to the programme of rural water supply in Benin that is more reliable than any information previously available. They are providing a sufficiently sound basis to enable modifications in the programme's design.

Clean water for health – a results chain with weak links

The causal link between clean water and better health is more complex than previously thought. That is perhaps the most important outcome of these impact measurements. There are numerous studies that demonstrate the positive effects of clean water on health, including one on an FC project in Guinea. Nevertheless, in both Benin and Yemen it is apparent that just because water is clean at the source, this does not guarantee that water will still be clean when it is actually consumed, or that there will be a corresponding improvement in health status. In rural areas of Benin, the combination of clean and contaminated sources of water, as well as unhygienic practices in handling water, are proving to be major obstacles on the path to greater impact on health. In Yemen, what proved to be a problem in one of the cities studied was the extremely irregular water supply caused by the scarcity of water resources. The frequent interruption of the water flow through the pipes makes it easier for contamination to occur, and the practice of storing water in individual tanks provides a breeding ground for bacteria. In the city of Amran, which on average is supplied with water on only 40 % of days, even a slight deterioration in the health status of the target group in relation to the control group was detected, albeit involving a very low incidence of waterborne diseases. In the city of Zabid, on the other hand, which is supplied around the clock, the target group not only saw the new water supply facilities as an improvement from their subjective perspective; based on the collected data, it was also possible to objectively demonstrate a slight improvement in their health situation.

Yemen: sources of clean water are not always available.



In the course of the impact analysis in Benin it was also possible to test promising solutions to the problem of water contamination between the source and the point of use, such as transport containers with a tap. In Yemen, on the other hand, no simple intervention to alleviate the problem is in sight. Integrated water resource management backed up by a conducive policy environment would be required in order to resolve the conflict between the extremely high consumption of water for agriculture in the mountainous regions around Amran, and the relatively low corresponding demand for drinking water. We hope that the impact evaluation carried out will help in emphasising the urgent need for action.

Impact evaluations: are they worth the effort?

Experiences with rigorous impact evaluations are valuable to us, not least because they help us better assess in the future when the expenses they require are worth the effort, and when they are not. We have learnt that these studies can provide us with additional insights and in-depth understanding compared to our standard ex post evaluations, particularly with regard to impact. But do these gains justify the costs?

In our opinion, yes, they do, and for several reasons. First of all, the argument often put forward against rigorous impact evaluations, i.e. that the findings are only valid for a single project and cannot simply be transferred to other projects, becomes less convincing over time. The more studies conducted on the same type of interventions, the more their results can be subjected to a meta-analysis within the framework of a synthetic review. This facilitates determining whether the impacts identified (or found to be lacking) strongly varied with the environment in which they occurred, or with the respective target group context, thereby limiting the informative value of past impact analyses for new settings.

Moreover, these rigorous impact analyses also tell us how we can utilise the knowledge we have gained about potential weaknesses to improve our standard ex post evaluations. In the future it may not be necessary to conduct further costly data collection rounds. Perhaps it will be sufficient to monitor the quality of drinking water at the respective points of use. This could provide us with hard facts suggesting where the weak links might be in the results chain from the clean water source to better health. Finally, not all rigorous impact measurements need to involve own costly data collection. Costs can be reduced drastically when existing data are used, e.g. data obtained from the statistical offices of partner countries. The FC Evaluation Unit has already gained experience in using existing data, in the course of an analysis of the impact on living conditions of the rural population in Zambia generated by infrastructural improvements in the road construction and water sectors. This impact analysis, based on various "Living Conditions Monitoring Surveys" and "Demographic and Health Surveys" conducted in Zambia, was carried out to supplement a comprehensive evaluation of budget support in Zambia. This evaluation was led by the Dutch IOB, the BMZ Evaluation Division and the evaluation unit of Sweden's SIDA. We intend to continue along this path of utilising partner systems.

To summarise, the cost-benefit ratio of rigorous impact evaluations is likely to improve in the future. As more results accrue, the yield will become more valuable and costs can be reduced by using partner systems.

Zambia: a road in a rural region

Robust impact assessment: where do we go from here?

This positive outlook for the future should not let us lose sight of the limitations of such impact measurements. Regardless of the expense incurred, an analysis that involves a comparison between target and control groups is only feasible in projects that are implemented in close proximity to the target groups, and that generate impacts which can be measured in the short term. We must be able to distinguish clearly between those people who benefit from an intervention and those who do not. This means that an impact analysis is not a feasible option for a large group of development cooperation interventions, i.e. all those that encompass an entire country or an entire sector, as well as those that aim to improve living conditions in the partner country indirectly, for instance through growth, or by constructing a new power plant, a highway or a port. The desire to generate measurable results should not mislead us into taking a less favourable view of the potential impact of projects that are less suited to impact measurement.

Finally, we return to the key question underlying every evaluation: are the results proportionate to the – limited – development funds? It is true that rigorous impact measurements can provide more precise information on impacts and how they are achieved, provided that the project is suited to this kind of analysis. So far, though, rigorous impact measurements have told us relatively little about whether the impact achieved is sufficient to consider the project a development success, whether the results are proportionate to the input, or whether the same results could be better achieved (i.e. at lower cost) via different development instruments (allocation efficiency).

Where measuring impact is possible, the endeavours by academia and evaluation practitioners should focus less on improving the accuracy of measurement, and more on contributing to the comparison of the cost and the respective outcomes and impacts of various development alternatives. In other words, the issue to be explored is what intervention should be used in a given sector to achieve a maximum of development progress.

Our conclusion: we will continue to gain experience with rigorous impact evaluations but we will also keep a very careful eye on the cost-benefit ratio of such analyses, and on their limitations. A mix of methods and standard ex post evaluations using continuously improved rapid appraisals will remain at the core of the FC Evaluation Unit's activities.

FEATURE: FINANCIAL SECTOR

BUILDING INSTITUTIONS IS KEY TO SUSTAINABLE RESULTS

During the last decade, barely any development approach held such great promise as microfinance. The idea seems simple: people who were previously excluded from the formal financial market obtain a loan, which enables them to start up a small business, generate income, later on perhaps jobs, and thus even contribute to the economic development of their country. The establishment of microfinance institutions (MFIs) creates access both to credit and to savings deposits, and each of these services offers new options for clients to protect themselves against risks. Moreover, being connected to payment transaction systems enables them to collect remittances sent by family members. Pensions can be paid out, and with the help of new technologies (such as mobile banking, in which bank transactions are completed using mobile phones) financial services can even be provided in remote regions.

For KfW Entwicklungsbank, which is now the largest funding agency in this sector worldwide (when adding up funds from the federal FC budget as well as funds of its own), financial sector promotion involves more than just microfinance. It also includes supporting public financial sector architecture in partner countries (for instance the establishment of deposit insurance schemes), promoting access to long-term finance for small and medium-sized enterprises or finance for environmentally sound technologies – to name a few examples. Financial sector development actually was one of the traditional areas of FC, with many projects dating back to the 1970s. However, there is barely any other field over the last twenty years where intervention approaches have undergone such profound change and rapid development as in financial sector promotion. We can trace the trajectory of this process by looking at the results of evaluations covering three decades: from the beginnings in the 70s and 80s, through the microfinance revolution of the 90s, and on to the last decade, during which the promotion instruments were further diversified. And the process certainly did not stop here as the financial crisis of 2008/2009 has already triggered a new cycle of learning and change.

Looking back, the overall picture for financial sector development is a positive one. German FC played a leading role internationally in ushering in changes in response to the initially disappointing results of projects launched in the 1970s and 80s. Since the mid-1990s we have seen a new generation of financial sector projects that focus on institution-building, and whose evaluation results have been positive virtually across the board. As evaluated over the last five years, the financial sector has been FC's most successful sector by far. This remains the case despite the criticism of the microfinance approach that has recently surfaced, triggered by the financial crisis and recent impact studies applying rigorous measuring methods. Although this criticism must be taken seriously, the evaluation results for FC – as will be demonstrated below – give us every reason to stand by the generally positive assessment of financial sector promotion.

Microfinance: sustainable financial institutions through cost recovery

Current FC projects in the financial sector are still founded on the basic principles laid out in the BMZ's financial sector strategy of 1994, even though details of the strategy have since been updated: "The aim is to assist in the sustainable development of efficient, inter-linked financial systems and viable institutions. These should be able to efficiently mobilise local savings, and provide investors with the reasonably priced lending facilities they need. At the same time, the concern is to provide broad sections of the population, particularly the poor, with access to financial services."

In practice, this marks a strategy shift. Institutional development is brought into focus as opposed to the former approach of directly supporting particular sections of the population. Microfinance Institutions (MFIs) are recognised as vital intermediaries that can provide sustainable access to financial services to those sections of the population hitherto excluded from the formal financial system. The key to sustainability lies in the

Georgia: ProCredit Bank – a shining example

Successful microbank in Georgia

"This project can be used as a best practice example." In 2004 the evaluators were clearly impressed by the success of this "new" type of financial sector project, and awarded the top score of 1 for the establishment of a microfinance bank in Georgia. FC supported the project in 1997 with an equity investment delivered through the German-Georgian Foundation, refinancing lines and funds for staff training totalling EUR 2.56 million. The establishment of the new bank was a joint project of private investors, led by Internationale Projekt Consult (IPC), and public donors or development finance institutions. Alongside the German Government's FC contribution delivered through KfW, these included the World Bank's International Finance Corporation (IFC), the European Bank for Reconstruction and Development (EBRD), and the Development Bank of the Netherlands (FMO). Only a year after it was established, the Georgian microfinance bank reached the break-even point. New products such as loans for micro and small enterprises were successfully launched on the Georgian financial market (thus deepening the financial sector). The bank also offered savings options for poor sections of the population, and integrated new groups of clients into the formal financial system (thus broadening the financial sector). The microbank even became a role model for others. Three other Georgian banks moved into the lending business for micro and small enterprises – and boosted the positive impact. Among other things, the stronger competition led to a drop in interest rates. The Georgian microfinance bank, which has since been renamed ProCredit Bank and incorporated into the ProCredit group, has not required any further subsidies for many years. It is a stable, reliable provider on the Georgian banking market that now has an established track record as a bank for micro and small entrepreneurs and "ordinary people".

capacity of these institutions, following a phase of development and professionalisation, to recover their own costs. When this occurs, the new clients' access to financial services is then maintained even without further external support. The institutions supported by FC include non-governmental organisations that are already extending microloans and intend to scale up and become a microbank, as well as commercial banks that are scaling down, i.e. intend to open new departments specialising in micro-entrepreneurs. Since existing structures are often very difficult to change, the establishment of new microbanks (also referred to as "greenfielding") has ultimately proved to be the most successful model. Under this approach, a completely new finance institution with a social mission is incorporated in a partner country. Institutional structures are formed according to principles of good governance, thereby contributing to their implementation in the partner country's financial sector in general. These institutions usually have a banking licence right from the beginning, enabling them to offer the full range of financial services encompassing loans, savings deposits and payment transaction services. The evaluations demonstrate one thing: the approach works.

By the time the ex post evaluations are carried out, almost all the institutions supported by FC have been able to recover their costs or even generate moderate profits. The new financial institutions operate with well-trained staff, and achieve a degree of efficiency that enables them to extend their loans, if not cheaply, then at least on significantly better terms than local moneylenders. The overwhelming majority of clients service their loans on time and according to contract terms. The evaluations show – with the exception of a brief phase following the financial crisis – constantly low default rates of below 5 %. Many institutions applied for a full banking licence either immediately when they were established, or following a successful initial phase, so that they could also offer savings and payment transaction services. This is because in an uncertain environment, as is found in many poor countries, it is especially important to be able to invest savings safely with a sound bank. Using their clients' savings deposits, the institutions are able to refinance themselves to a large degree without external support, even though the demand for credit has grown enormously.

All this constitutes evidence that the funds provided to support the establishment of microfinance institutions have set a development process in motion that is able to spread and generate sustainable results on its own.

Financial sector support: past and present

Development interventions in the financial sector were not always as successful as they are today. Microfinance is perhaps the most impressive example of how lessons have been learnt from past failures to achieve results. Outcomes falling behind targets and a lack of sustainability of the little actually achieved led to a radical change in thinking that is rightly termed the 'microfinance revolution'. The direct promotion of micro and small entrepreneurs through special credit lines reserved for them was replaced by an institution-building approach. Ex post evaluations allow tracing how this radical strategy shift leads to results, because since its founding FC has always evaluated the development effect of its projects and programmes once they were completed (initially within the responsible operational department itself and since 2000 through an independent evaluation unit).

During the 70s and 80s projects to promote lending were designed primarily to ensure that the money reached the target group, i.e. the entrepreneurs, farmers or artisans that had no access to credit. Loans for micro-entrepreneurs were also designed to be delivered at particularly low interest rates, assuming that this was providing adequate support to poor people. Allocation of these credits, which inherently was not a commercial business, was often performed by state development banks. However, these institutions usually did not succeed in reaching entrepreneurs who would be especially eligible for support, or in creating sustainable access to financial services. New ways had to be found of creating a sustainable credit supply for these entrepreneurs.

Bolivia: a micro-entrepreneur with her own market stall

A new start was made, helped by the lesson learned from these failures, which was: it is not cheap loans that are key, but loans that can be repaid from the proceeds of business activity. Micro-entrepreneurs, too, must be viewed as clients who require financial services and are able to pay for them. This is demonstrated by the informal financial market and the business done by local moneylenders. First attempts by microfinance institutions in Latin America and Bangladesh to treat the target group not as recipients of support but as a new group of clients to be won over bore fruit. The "wrong" clients did not show up, because there was no "cheap" money to be had any longer. Repayment rates for these loans improved dramatically. The hope of providing sustainable access to loans and other financial services proved to be a realistic one. The microfinance "revolution", which shifted the focus onto developing financial institutions that were responsive to target group needs, was now in full swing – and not just in German FC.

A financial sector project of the "old" kind: a failure in Zambia

In 1986 the Government of Zambia received FC funds totalling DM 5 million in order to promote the competitiveness of small and medium-sized industrial enterprises. This was to be achieved by delivering loans, allocated by the state development bank. It later emerged that although these monies had been allocated to private industrial enterprises, these beneficiaries were not competitive and were therefore unable to service the loans. When the project was evaluated, 90 % of the borrowers were in arrears with their repayments, and many of them had seemingly never intended to pay back the funds. This mismanagement proved so serious even during the project that KfW discontinued it prematurely – providing an impressive demonstration of the fact that sustainability in financial sector promotion was already a high priority at that time. The project was awarded an overall rating of "clearly inadequate" (5), because no development results were achieved.

Just what a turnaround was brought about through the impact of financial sector projects by the "revolutionary" change in strategy is more than amply demonstrated by the evaluation results. In projects implemented from 1970 to 1995 the success rate remained at a relatively low level of 45 to 63 %. The target group was often not reached, in many cases inefficient enterprises were promoted, and long-term effects were rarely recorded (i.e. there was a lack of sustainability). This outcome underlines the fact that even then, the evaluations were applying sustainable and efficient lending as the standard for measuring development results, even though at that point in time no appropriate model had yet been found to meet this standard on a regular basis.

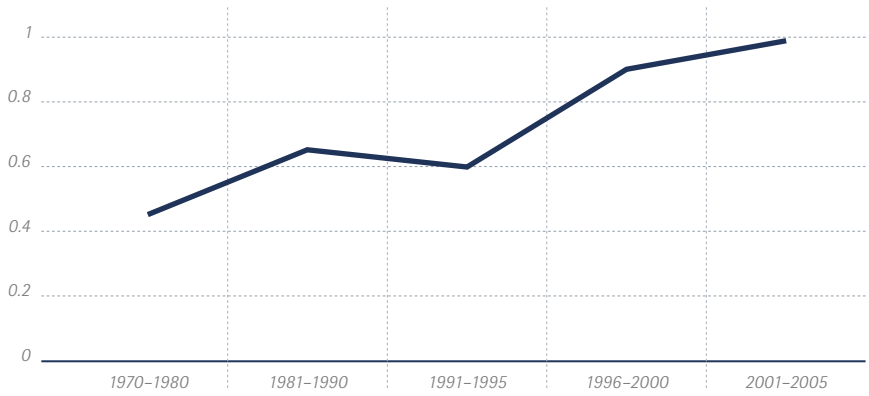
In projects launched after 1995, however, the success rate rose dramatically, reaching values of between 90 and 100 %. Since that time, the majority of interventions actually succeeded in opening up access to financial services for new client groups, and loans are largely granted to entrepreneurs who are also able to service them – an indication of the fact that they have successfully invested the money they borrowed. Microfinance institutions are able to offer their services sustainably. Financial Cooperation in the financial sector has learned from previous errors, and has adopted, developed and refined promising new ideas and models. The success story is continuing to this day.

More than microfinance: current financial sector projects

What began in the early 90s with the initial application of the institution building approach in microfinance has since emerged as a global model. For a long time the microfinance sector was achieving double-digit growth rates, reaching almost every corner of the world. Accordingly, this rapid change also had to be taken into account when planning projects. While the financial systems in many Latin American and Eastern European countries are now well developed, numerous countries in Sub-Saharan Africa are still at an early stage of development. German FC projects are correspondingly diverse. They range from greenfield investments into new microfinance banks (Africa and Middle East), to the reform of public financial architecture, for instance through deposit insurance schemes (emerging Asian and Eastern European countries), to the promotion of long-term lending for housing construction and rehabilitation, the development of small and medium-sized enterprises or investment in energy efficiency and environmental protection (Latin America, Asia and Eastern Europe).

To ensure that the support provided generates maximum impact, intervention designs must be tailored to suit both the financial market sophistication and the particular circumstances of the partner country in question. Furthermore, experiences gained through practice must be continually used to refine the approach. Here is a good example of how strategies are optimised over time: the foundation of a new microfinance bank, which has been a particularly successful approach for institution-building in the past, is nowadays seldomly implemented as a standalone solution. Instead, a new bank is established as a new member of an already existing international group of microfinance banks. One such case is the Microfinance Bank of Azerbaijan, which is a member of the Access group. The bank was established as a new subsidiary of the group in 2001, supported among others by German FC through a fiduciary holding. When the FC engagement was evaluated in 2009 it received the best possible rating (1), not least because the bank had created sustainable access to financial services not only in urban, but also in rural areas, which are seen as presenting a difficult challenge. The positive image of the bank

Evaluation of financial sector projects through time (average success rate)



Values based on average success rate of the evaluated projects launched during the following periods: 1970–1980: 18 projects, 1981–1990: 40 projects, 1991–1995: 44 projects, 1996–2000: 55 projects, 2001–2005: 40 projects

gained by the evaluation team in 2009 is backed up by the fact that the internationally renowned magazine "Euromoney" awarded it the title of "Best Bank of Azerbaijan" in 2010. This example is not the only evidence to demonstrate that in the microfinance sector it is now sometimes sufficient to provide only a small volume of promotional funds to attract other financiers for a project – including both ethically motivated and commercial investors. Mechanisms, in which donor funds serve as leverage to attract private capital, are now being used quite frequently to facilitate innovative finance solutions. Special investment funds are set up, for instance to provide loans or even equity to a portfolio of microbanks. The investment fund is refinanced only partly by public development institutions as lead investors. Their share serves as an incentive, while also absorbing a sufficient amount of risk to increase private investors' interest in joining. Like groups of microfinance banks, these investment fund structures also have the advantage that their risk is spread across several microfinance institutions and countries. At the same time they are able to generate synergies, not least through joint learning and knowledge exchange. The idea behind all these innovations is that through the leverage mechanism a given amount of development funds can achieve a larger impact.

Kosovo: business loans are designed to get the economy moving.

Although most of these innovative approaches have not yet been evaluated, one evaluation conducted in 2008 does confirm that the investment fund solutions generate results as envisaged. The evaluation looks at a group of originally country-specific FC funds that were launched in several countries of Southeast Europe to support post-conflict reconstruction in the late 90s. These funds were subsequently transferred into the European Fund for Southeast Europe (EFSE). This fund, which was established in 2005, has since been offering funding for (micro-) finance institutions with a pro-development agenda in the countries concerned. Not least because the EFSE is considered a model with a

Establishing a deposit insurance scheme in Armenia

"An important step toward a sophisticated financial system". In 2010 the project to establish a deposit insurance scheme in Armenia was awarded a positive rating (2). Since the scheme was established, should a commercial bank go bankrupt, small savers would be able to retrieve their money from a guarantee fund (which fortunately never was the case so far). To capitalise the fund right from the outset, the Armenian Government was provided with an FC loan of EUR 3.5 million, which was paid into the fund. A further FC contribution of EUR 0.4 million was channelled into accompanying support measures, most notably training for staff of the fund. In the long run the fund will be financed exclusively through compulsory contributions from Armenian banks, who have so far paid their contributions as and when due. Since the fund was established in 2005 there have been quite a few tangible developments that indicate the project is having a positive effect. The volume of savings deposits has risen sharply. The main beneficiaries of this are the depositors themselves. They no longer have to hoard their money under their pillows. Now they can leave it with the bank for safekeeping, and even obtain interest on top. In a broader perspective, the rise in deposits benefits the entire Armenian economy, because savings, which are often in local currency, are channelled back into the economy in the form of loans.

promising future, all the projects transferred to the EFSE were rated as being "good" or "very good". Once again, the evaluation team were not alone in reaching this positive judgement. At the G20 Summit in Seoul in 2010 the EFSE, which has now become the largest microfinance fund in the world, was recognised as an outstanding innovator and received the G20 – SME Finance Challenge Award.

A special case: environmental credit lines

Not all innovative projects demonstrate outstanding results immediately. Credit lines designed to use the banking sector as a multiplier in order to spur investments with positive environmental impacts seem to belong to this category. The approach can require highly complex measures, and the success or failure is dependent on factors that are extremely numerous and often difficult to control: national environmental legislation, the technical expertise available within environmental institutions, national awareness of environmental protection issues, and the quality of financing institutions, for instance with regard to the selection of borrowers. To give an example, there is no incentive for companies to make their production processes environmentally sound if the state does not enforce environmental legislation and cleaner production just leads to higher production costs born by the entrepreneur. These numerous factors, all of which have to be met in order to generate results, are also reflected in the evaluation reports. No environmental credit line has yet achieved the top score, and the average is below that for the ratings of other financial sector projects. In turn, in these cases evaluation can be especially helpful in improving project design and bringing to light what works and what does not.

Environmental loans in Chile

"In order to influence corporate investment decisions, and especially decisions of such fundamental and lasting significance as relocation, ... we need incentives that are far stronger than low interest rates, such as tax incentives." This quote from the evaluation report hints at the fact that although this project did teach us some valuable lessons it was nevertheless rated as "unsatisfactory". In 2002 the Chilean Development Bank (CORFO) received a German Government loan, delivered through KfW, worth EUR 23 million. This credit line was designed to enable CORFO to offer loans with preferential interest rates to small and medium-sized enterprises. The loan was supposed to help firms leave the heavily polluted Greater Santiago de Chile area, and move to less polluted regions away from the capital. However, it soon emerged that the interest-based incentives were much too low to motivate companies to make this change. Interviews with representatives of the companies concerned conducted by the ex post evaluation team indicated that much stronger incentives, for instance of a fiscal nature, would have been necessary to persuade business decision-makers to relocate their production activities for environmental reasons.

Chile: aiming to free Santiago from smog

India: granting small loans

Microfinance in turbulent times

When the financial crisis broke out in 2008, the boom that the financial sector promotion had been enjoying, particularly in the field of microfinance, came to a halt. Many microfinance institutions experienced rising default rates, private investors began withholding further investment in microfinance, and the refinancing of many microfinance institutions became more difficult. At the same time, in some countries indications of overheated microfinance markets became evident. Suddenly, the main focus in these markets was no longer adequate access to finance. Instead, attention shifted onto the risk of household over-indebtedness, leading to negative headlines in the western media that called the whole microfinance approach into question. At the same time, some scholars began criticising the outdated methodology of older studies claiming positive the impacts of microfinance; the advocates and representatives of microfinance were accused of having always claimed that microfinance alleviated poverty, while only rarely having demonstrated those effects conclusively. What light can our FC evaluation experience shed on the current state of the debate concerning the impact of microfinance?

From the financial crisis to the impact crisis?

The financial crisis had noticeable effects on financial sector promotion in general, and microfinance in particular, though not to the same extent in all countries.

The first wave of the crisis, which caused the refinancing options for banks to suddenly dry up, affected chiefly those MFIs and countries that were already better integrated into the international financial markets. Prime examples included Southeast and Eastern Europe, as well as some countries in Central Asia. This is reflected in some evaluations conducted since 2008, although none of these were related to the regions hardest hit. A programme to promote finance for housing construction and rehabilitation in Armenia was designed among other things to develop refinancing options via the local capital market. It was not possible to implement this component as planned due to the negative experience with housing promotion in western capital markets during the subprime crisis. An evaluation in Azerbaijan showed that microfinance institutions were curtailing their lending activity because options for refinancing were lacking. However, it also emerged that development financiers played an important role in helping cope with the first wave of the crisis. While private investors were withdrawing, affected MFIs received targeted support during the crisis from those development finance institutions that had supported MFIs' establishment and growth

in the first place. These supportive measures during the crisis helped prevent short-term liquidity problems from turning into an existential crisis for MFIs that were otherwise healthy.

The second wave of the global financial crisis, triggered by the real economic effects, impacted in the first instance not so much the MFIs as their borrowers. Due to the downturn in the industrialised countries, companies in partner countries also lost their export markets. What was also important for the microfinance sector was the fact that many migrants were unable to send remittances to their families, which the latter might have needed in order to service their loans. In some countries this was compounded by depreciation of the national currency, which made it more difficult to repay loans in foreign currencies. Default rates rose dramatically, especially in those countries where extremely high growth rates had been achieved in the microfinance sector in previous years. This also affected FC-supported MFIs, as was noted by evaluations in Tajikistan and Mozambique, among others. The average rise in default rates among the institutions supported by FC was, however, lower than the average for all MFIs that report their data to the "MixMarket" public database.[10] One reason for these positive reports might be the following: consumer lending which has been identified as a main driver of household over-indebtedness is practiced by supported MFIs only to a minor degree. Evaluations regularly show MFIs' limited engagement in this field of business along with their strong commitment to principles of responsible finance in general. Along with other actors, German FC has been supporting the development and dissemination of these principles since long before the crisis.

Initially, the crisis took the management of the affected MFIs by surprise. A swift change of thinking was required. Rather than broadening the financial service offering, consolidation was now at the top of the agenda. Too rapid growth needed to be kept in check, and in some cases the credit portfolio even needed to be reduced. Loans had to be restructured or written off, and default rates had to be brought down to an acceptable level. The institutions concerned have adjusted to the new situation, and learned their lessons from the crisis. Today, very many of these institutions are once again operating profitably.

This is first of all a positive sign for the microfinance approach. In the past, growth was too rapid. Undesirable trends have now been corrected, and the MFIs have survived the worst of the crisis largely unscathed. By undergoing the consolidation phase they have also taken a further step toward becoming a perfectly normal sector of the economy. When we look at the effects of microfinance from the clients' point of view, though, what lessons do we need to learn from the crisis?

The risk of over-indebtedness, and what can be done to prevent it

Credit is not without risk for the client. Not even the most careful credit assessment can provide complete protection against unexpected events (such as the financial crisis) that can make it either more difficult or even impossible to repay a loan. This also applies to loans extended by FC-supported financial institutions, despite their restraint with regard to consumer lending business, and despite the principles of responsible finance, which FC has been committed to mainstreaming for many years (and successfully so, as evaluations demonstrate). The risk of payment problems arising is exacerbated when the client takes out loans not only with a single financial institution, but simultaneously from several sources. A client's ability to service his loans then becomes more difficult to assess, unless information on his total indebtedness is collected at an information bureau like a credit agency. In some countries the establishment of credit agencies is being supported through German development cooperation. These agencies cannot, however, protect the client against credit suppliers who do not feel committed to principles for responsible lending.

Ex post evaluations address the problem of over-indebtedness by surveying default rates, reviewing involvement in consumer credit business and assessing commitment to the principles for responsible finance. Occasionally they warn of the risks of fierce competition (as in the case of an evaluation in Mozambique), or emphasise particularly positive examples of client protection (as in the case of Tajikistan). At the First Microfinance Bank of Tajikistan, which was supported by FC, a client's debt is cancelled if it can be proved that repayment problems have occurred due to an external shock for which the client is not to blame (such as the death of a family member). In order to learn more about the problem of over-indebtedness specifically from the client's perspective, and to do so to the extent that is not possible within the scope of ex post evaluations, the FC Evaluation Unit supported a research project in Ghana (see p. 44/45).

[10] This was shown by an analysis of all data supplied to the "MixMarket" microfinance database by MFIs around the world. The analysis was conducted by the FC Evaluation Unit, and is available on request.

How effective is microfinance really?

Borrowing also entails risks for the client which go hand in hand with the positive effects that made microfinance such a success. Recently, however, doubts have been raised as to whether these positive effects really do occur to the degree hoped for. Why?

Microfinance is not a panacea. This has been noted in the academic literature ever since the famous essay "The Microfinance Promise" by Jonathan Morduch was published in 1999, if not before. In recent years, however, there has been a growing debate on how effective microcredits really are. Based on refined statistical methods, a reassessment of results produced by older research shows that although effects were achieved, these were less significant than had been assumed. Today, the evaluation community views rigorous impact studies that compare target and control groups as the method of choice for in-depth measurement of results at target group level. Studies of this kind conducted on the aforementioned data came to the conclusion that positive effects were present, but were far less significant than assumed during the 90s. Given that this is the case, the question inevitably arises of whether microfinance is simply being overestimated as an instrument of development cooperation.

Even if some advocates of microfinance did perhaps promise too much, the evidence available from impact measurements does not in any way warrant a fundamental reassessment of microfinance. A systematic survey of the literature shows that just a handful of impact measurement studies on microfinance are available that would meet the highest standards of methodological rigour, i.e. compare really similar target and control groups. These studies investigate different projects in different countries, and even different financial services. They demonstrate moderately positive impacts throughout.

Microfinance has not been shown to have a major impact on the income of poor households. However, the existing rigorous impact studies (partly for methodological reasons) only cover a period of a maximum of 18 months, which was probably too short to be able to observe any significant changes

Rigorous impact measurement in microfinance

Analyses from Morocco (2011) and India (2010), conducted among others by the economists Esther Duflo and Abhijit Banerjee of the Massachusetts Institute of Technology (MIT), demonstrate for instance that entrepreneurs and people who have a marked tendency toward self-employment are particularly likely to take out a loan in order to start up a business or further develop an existing one, though not in order to start up in new and innovative sectors of the economy. The analyses also show that the profits made by companies grow along with their investment and rate of saving, though not as sharply as was claimed by methodologically less rigorous studies conducted in the 90s. Another study by the US economists Dean Karlan and Jonathan Zinman in the Philippines (2009) concluded that microcredits primarily protect against economic shocks (such as those resulting from a death in the family), and that borrowers invest more in education. A further experiment carried out by Dean Karlan (2010) also proves the positive impact of microinsurance on the productivity of farmers. Finally, in a study in Kenya, Pascaline Dupas and Jonathan Robinson (2009) show that opportunities to save are conducive especially to the economic activity of women, because this provides them with a means of protecting their money against access by third parties.

in life circumstances. Moreover, none of these studies is able to capture those indirect effects generated by reforms and further development of the financial market which were accompanying the institution-building approach in microfinance. For instance the positive change that was brought about as a result of the training of bank personnel, some of whom long ago moved to other financial institutions than those promoted, or as a result of the improved governance structures that have arisen in conjunction with new micro-banks in many developing and emerging countries. Numerous microfinance institutions have also committed to the principles for responsible finance and client protection, thus helping stabilise the entire financial system. Several empirical analyses conducted at the macro level have demonstrated that there are benefits to be gained by developing the financial system, because it benefits the economy as a whole, and can even help reduce the gap between rich and poor. Even if these studies – compared to rigorous impact measurement on the micro-level – present other methodological problems and limitations, it remains indisputable that all these results underline the positive impact of financial system development, and that there are no findings to the contrary which would point to systematic negative effects.

We may therefore conclude that, even after taking account of the lessons learned from the financial crisis and conclusions to be drawn from new impact studies, microfinance remains an important instrument for development cooperation.

It displays clearly positive effects, albeit lesser ones than sometimes hoped for. However, ever since the financial crisis some positive effects of microfinance have become even more important, particularly those impacts generated by the governance structures of microfinance institutions that are not geared to short-term profit. Instead, these institutions focus on sustainability and on responsibly serving hitherto underserved client groups. A further point in microfinance's favour also remains important and should never be underestimated. Financial sector promotion generates sustainable results without the need for a continuous injection of further support funds. Furthermore, possible participation by ethical investors can mobilise private capital so as to benefit poor people. This positive cost-effect ratio remains an important argument in favour of promoting microfinance. The ability of microfinance institutions to survive in the marketplace offers clear evidence of the sustainable effects initiated by the institution-building approach.

Azerbaijan: staff members of AccessBank

Over-indebtedness – an undesirable side-effect of microfinance?

Responsible finance answers from Ghana

In order to find out precisely when and why a client becomes over-indebted, KfW's Independent FC Evaluation Unit, together with the Smart Campaign (a global campaign for client protection in microfinance, supported by KfW among others), promoted a research project in Ghana. Based on a survey of more than 500 households, the study showed that for many microfinance clients keeping up their repayments represents an unacceptable burden. The widespread assumption that clients in Ghana often engage in multiple borrowing and are subsequently unable to repay their loans was not confirmed, at least not for Ghana's best and most responsible microfinance institutions which took part in this study.

How do clients see the issue of indebtedness?

In the past, empirical studies have focused on examining how clients' payment problems affect microfinance banks' repayment rates, and what consequences this has for the banks. Seen from the perspective of clients, this issue may look very different. From a customer protection point of view, borrowers who are keeping up their payments but have to make unreasonable sacrifices in order to do so can already be considered over-indebted. In this study, borrowers are thus defined as over-indebted if they report repeated sacrifices to keep up their repayments that they consider unacceptably high.

By this definition – how many microbank clients in Ghana are over-indebted?

Around 30 % of respondents fell under this client protection-based definition of over-indebtedness, i.e. they felt that the sacrifices they had to make in order to service their loan were no longer tolerable. For instance, when they were frequently only able to eat one meal per day, had to sell household items or were forced to remove their children from school, many considered these additional burdens unacceptable.

Many of the remaining 70 % also indicated that they made sacrifices, but described these as acceptable. For instance, 61 % of all respondents indicated that they worked more than they would otherwise do in order to repay their loan on time, 54 % deferred other important expenses, and 34 % depleted their savings at least to some extent. 26 % of all borrowers did not find it difficult to repay their loan.

Have Ghana's microlenders extended too many loans?

Not necessarily – the study did not demonstrate any causal link between lending and clients' payment difficulties. Most clients did not regret taking out their loan, despite the difficulties this entailed. Although the problems associated with over-indebtedness can be caused literally by having borrowed "too much", there are also many other reasons for payment difficulties, for instance when a business idea fails to succeed or when a family member falls ill.

Clients at a microbank in Ghana: finding out more about credit products

Does over-indebtedness result from multiple lending to the same person?

Although multiple loans were a major problem in some countries, such as Bosnia and Herzegovina, there is no evidence of this in Ghana. At least for the microfinance institutions that took part in this study, which are among the best in the country, multiple loans are not a problem among their micro borrowers. 93 % of all clients surveyed stated that they had only a single loan, including informal debt relationships. No one reported having more than three loans at the same time. This figure was also confirmed by comparing the client databases of several lenders. In other words, over-indebtedness can occur without multiple loans (for instance when a business fails). At the same time, the accumulation of loans can make over-indebtedness worse.

What should be done to avoid over-indebtedness?

There are a wide range of potential solutions for reducing over-indebtedness. What measures are likely to succeed will depend on the local context and the nature of the over-indebtedness. In Ghana there appears to be major potential for tackling the problem of over-indebtedness by further developing credit products. When repayment plans are more closely aligned with clients' irregular earning patterns, this causes a reduction in both the default rates for the institutions and the financial burden placed on the borrowers.

Further potential lies in supplying clients with even better information on credit products. Only 13 % of respondents had at least an approximate idea of their interest rate. As a result, most of them were unable to understand how a loan really works.

Microfinance banks and donor institutions should therefore invest more in the financial literacy of micro-borrowers as a basis for informed borrowing decisions and skilful management of the clients' personal finances. Some institutions are already doing this successfully.

Furthermore, the promotion of credit bureaus helps to prevent situations where several microfinance institutions unknowingly work with the same borrower. In Ghana, a credit bureau is currently being established. Ultimately, of course, the best means of preventing over-indebtedness are careful assessments of the borrower's ability to repay and appropriate lending practices.

The study was conducted by Jessica Schicks, who is a doctoral student at the Université Libre de Bruxelles (ULB). She is based at the Centre for European Research in Microfinance (CERMi), where she is working on her doctoral thesis on the problem of over-indebtedness among microfinance clients.

ANNEX

KEY CRITERIA FOR EX POST EVALUATION

Benchmarks and standards

The ex post evaluation of an individual project is the final step in the project cycle of an FC intervention. All ex post evaluations have a standard methodological approach: actual project outcomes are systematically compared to the intended outcomes envisaged at the time of appraisal.

However, it may well be the case that by the time an intervention is evaluated, both the methodology and the development debate have advanced compared to the time of appraisal. Therefore, we apply additional benchmarks derived from the current sectoral and suprasectoral concepts of the BMZ and the partner country as well as from current general development policy standards. The current "state of the art" is always a deciding factor in evaluation.

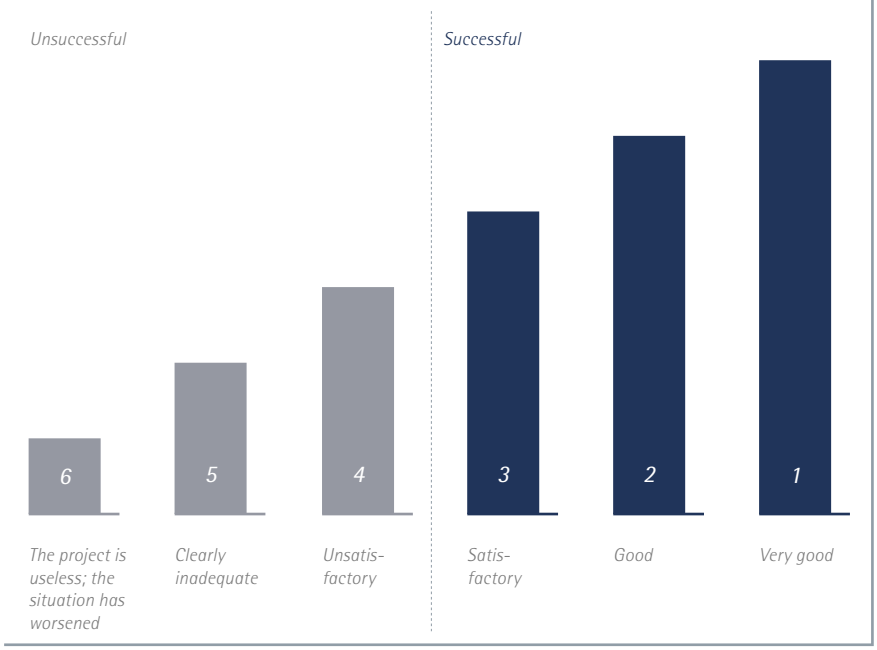
In order to evaluate a project's development results, it is analysed with regard to the five key criteria agreed upon by the international donor community through the OECD Development Assistance Committee (DAC): relevance, effectiveness, efficiency, impact and sustainability.

KfW evaluates the first four key criteria individually using a six-point rating scale. Scores of 1 to 3 indicate that the project is considered "successful", while scores of 4 to 6 indicate that it was "unsuccessful".

Sustainability is rated on a four-point scale. The scores for the five key criteria are then combined using a project-specific weighting system to produce an overall score or rating. This overall score indicates at a glance whether a project was successful or not, and how highly the success of the project is rated.

While the first four criteria relate to the actual situation at the time of the evaluation, the sustainability rating is based on expectations concerning the project's future development. Therefore, it is particularly based on an assessment of the opportunities and risks that may affect its future impact.

Rating scale



Relevance – are we doing the right thing?

The criterion of relevance is used to measure "the extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies" (OECD-DAC Glossary of Key Terms in Evaluation and Results Based Management). We therefore need to assess the extent to which the project focuses on an important development problem (development priority), and whether there is a plausible causal link between the project and its development objectives (validity of the results chain). We also need to assess the extent to which the intervention is aligned with the (sector) policies and strategies of the partner country (national plans, poverty reduction strategy) and partner institutions, and with the goals and guidelines of the BMZ and international standards (international agreements, Paris Declaration etc.).

Effectiveness – are we achieving the objectives of the development intervention?

The criterion of effectiveness is used to measure "the extent to which the development intervention's objectives were achieved [...] taking into account their relative importance" (OECD-DAC Glossary). We therefore need to assess the actual results of a project in terms of its direct benefits. The intended positive results are reflected in the project objectives. To be able to measure effectiveness, the project objectives must be expressed in terms of specific production and supply levels, and acceptable limits must be defined for the anticipated negative secondary effects. In a municipal water supply project, for instance, an indicator of effectiveness might mean that upon completion of the project, 80 % of the inhabitants of the town have all-year-round access to drinking water, while at least 95 % of regular water samples fall within the WHO limits. If any unintended (positive or negative) effects occur, these are also included in the evaluation of effectiveness in the same way as the intended results.

Efficiency – are the results being achieved efficiently by the development intervention?

Efficiency is "a measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results" (OECD-DAC Glossary). This involves a multidimensional assessment. First of all, we ask whether the goods and services (outputs) generated by the project were produced at an appropriate cost (production efficiency). Far more important, however, is the allocation efficiency, i.e. the appropriateness of the ratio of funds allocated to outcomes/impact achieved. Evaluating the efficiency of allocation thus calls for a comparison of alternative options for generating similar results. Cost-benefit analyses deliver important indicators here.

Impact – does the development intervention help achieve overarching development-policy goals?

The project objectives are pursued with a view of achieving long term development goals, in other words with regard to the primary development impacts that justified funding the project in the first place. In the case of a water supply project, for example, the main issue is not how much water the target group consumes (direct benefit), but rather the impact on the group's health status resulting from the improved water supply. Impact often cannot be measured precisely, which means that it has to be estimated and made plausible based on the available evidence.

Sustainability – are the positive outcomes lasting?

Sustainability is one of the most ambiguous terms in the international development debate. The sustainability criterion is met when the project executing agency or target groups can, once external financial, organisational or technical support has ended, continue the project activities self-reliantly and generate positive outcomes for an appropriate period. Risks and opportunities that might affect the sustainability of the development intervention are evaluated with respect to the probability that they will materialise.

Ex post evaluations in 2009 and 2010 (Projects included in the sample shown in blue)			
Country	*Project title*	*Volume of funds (EUR million)*	*Rating*
Financial sector			
Afghanistan	*Establishment of the First MicroFinance Bank (Fiduciary Holding)*	1.5	2
Armenia	*Development of a Deposit Guarantee System*	3.5	2
	Creation of a Sustainable Market for Housing Finance, Phase I	6.0	2
	Creation of a Sustainable Market for Housing Finance, Phase II	6.0	2
Azerbaijan	*MicroFinance Bank of Azerbaijan/AccessBank AZE FC Fiduciary Holding I*	1.5	1
	MicroFinance Bank of Azerbaijan/AccessBank AZE FC Fiduciary Holding II	1.2	1
Cambodia	*Funding for Small and Medium-sized Enterprises, Phase I*	2.5	2
Chile	*Environmental Credit Line/Regional Credit Line CORFO II*	7.7	4
	Microloans Programme CORFO (interest rate subsidisation)	3.0	2
China, PR	*SME Lending Programme III*	55.8	2
	SME Lending Programme II	12.8	3
Egypt	*Dakahliya Rural Finance Programme I*	14.0	5
India	*National Renewal Fund – Support for Business Start-ups – SEWA Bank*	1.2	4
Kyrgyzstan	*Credit Line for the Private Sector Bank AKB Kyrgyzstan IV*	4.6	3
Mali	*BNDA, Credit Line VIII*	3.9	2
Macedonia	*Funding for Small and Medium-sized Enterprises I*	6.6	2
	Funding for Small and Medium-sized Enterprises II	6.2	2
	Funding for Small and Medium-sized Enterprises III	7.7	2
Mozambique	*Sociedade de Credito de Mocambique*	0.5	2
Namibia	*Establishment of a Payment System for the NamPost Savings Bank*	0.9	2
Philippines	*Environmental Protection in Industry II*	9.4	2
Romania	*Funding for Small and Medium-sized Enterprises II*	4.6	3
	Timisoara Wholesale Market	2.6	2
Tajikistan	*First Microfinance Bank Tajikistan (Credit Line)*	1.5	3
	KfW Fiduciary Holding in the First Microfinance Bank	1.0	3
Tunisia	*Industrial Environmental Funds I*	9.2	3
	Industrial Environmental Funds II	15.3	3
Uzbekistan	*Credit Line for Private-sector Investment Promotion SME II*	4.6	2

Agriculture/forestry/fisheries			
Bolivia	*Irrigation in Sacaba Valley (Alternative Development)*	7.9	3
Cape Verde	*Afforestation on Maio and Santiago*	2.6	2
Cote d'Ivoire	*Forestry Sector Programme I (Eastern Forests Component)*	20.5	4
Guinea	*Forestry Programme*	6.1	4
	Management of Forest and Rural Resources (PGRR)	12.5	4
Mali	*Self-help Fund Dogon Land II*	6.9	2
	Self-help Fund Dogon Land III	11.0	2
Pakistan	*Chashma Irrigation Project, Phase III*	38.4	4
Peru	*Southern Andean Zone Irrigation Programme III Apurimac*	7.7	2
Vietnam	*Afforestation Lang Son and Bac Giang*	4.6	2
Zimbabwe	*Irrigation Programme Communal Areas III*	0.6	4
Social infrastructure – population policy			
Burkina Faso	*PROMACO II, Family Planning and HIV/Aids Prevention, Phase II*	8.6	2
	Social Marketing for HIV/Aids Prevention, PROMACO III	4.4	2
Cambodia	*Reproductive Health Care*	5.1	2
Pakistan	*Family Planning Programme (Social Marketing of Contraceptives) II*	4.1	3
Uganda	*HIV/Aids Prevention II*	5.1	2
Uzbekistan	*Promotion of Reproductive Health I*	2.6	2
	Promotion of Reproductive Health II	2.5	2
Social infrastructure – education			
Indonesia	*Science Education Quality Improvement Project (SEQIP I)*	12.3	3
	Science Education Quality Improvement Project (SEQIP II)	10.4	3
Mozambique	*Basket Fund ESSP*	5.0	3
Pakistan	*Basic Education in Charsadda*	5.1	3
	Basic Education Programme NWFP	20.4	3
Philippines	*Dual Vocational Training*	6.8	4
Social infrastructure – health			
Benin	*Basic Health Services*	3.8	3
Indonesia	*Improving Health in Nusa Tenggara Timur*	11.0	4
Malawi	*Improvement of Health Services in Chitipa District*	2.8	3
Mauritania	*Health and Population in Hodh El Gharbi*	1.8	4
Nepal	*Basic Health Programme I*	4.6	3
	Basic Health Programme II	3.6	3
Tanzania	*Joint Social Services Programme (Health II)*	3.4	3
	District Health Care in Mtwara Region	1.5	3
Uzbekistan	*Tuberculosis Control Programme I*	2.6	2
	Tuberculosis Control Programme III, Programme of Action 2015 special funds	2.5	2

Social infrastructure – State/civil society/other			
Afghanistan	*Afghanistan Reconstruction Trust Fund (ARTF) V*	20.0	2
	Afghanistan Reconstruction Trust Fund (ARTF) VI	20.0	2
Egypt	*Social Fund for Development (SFD)/Infrastructure for Employment in Poor Urban Areas*	3.1	3
Georgia	*Social Investment Fund GSIF II*	7.4	2
Kenya	*Slum Rehabilitation Mathare 4A*	6.6	3
Macedonia	*Social Infrastructure Programme III*	5.1	3
Social infrastructure – water supply and sanitation/solid waste management			
Albania	*Water Supply and Sanitation Kruja I*	6.2	4
	Water Supply and Sanitation Kruja II	1.8	4
	Rural Water Supply Kavaja	4.9	3
Bolivia	*Water Supply Rehabilitation Oruro*	4.9	3
CAR	*Rural Water Supply*	2.6	3
Georgia	*Rehabilitation of Public Infrastructure Facilities, Phase I*	3.8	3
India	*Rural Water Supply, Rajasthan, Phase I*	77.1	4
	Rural Water Supply, West Bengal	26.9	2
Jordan	*Waste Water Conveyor in Amman-Al Samra*	45.4	2
Kosovo, Rep.	*Rehabilitation of Urban Drinking Water Supply I*	4.8	2
	Extension of Urban Water Supply to Istog and Kline	1.0	2
	Rehabilitation of Urban Drinking Water Supply III	2.6	3
Morocco	*ONEP Standpipe Programme*	25.6	2
Nicaragua	*Basic Facilities in Rural Areas I*	7.7	4
Niger	*Maradi Rural Water Supply, Phase I*	8.1	4
	Maradi Rural Water Supply, Phase II	5.7	4
Tanzania	*Rural Water Supply in East Kilimanjaro*	3.8	4
Togo	*Water Supply Sokodé II*	3.8	4
Tunisia	*Sewage Disposal 6 + 2 Locations in the Medjerda Valley, Phase II*	32.7	3
	Sewage Disposal, Lake Bizerte	16.4	3
Turkey	*Waste Management in Denizli*	8.3	2
	Sanitation Facilities for Malatya	23.2	3
	Sewage Collection Diyarbakir	17.9	2
	Treatment Plant Diyarbakir	27.1	2
	Environment Project Dalyan/Köyceğiz	17.4	3
Suprasectoral/structural aid			
Afghanistan	*Afghanistan Reconstruction Trust Fund (ARTF) IV*	15.0	2
Bolivia	*Poverty-oriented Emergency Aid Programme*	5.1	3
Brazil	*Protection of the Atlantic Coastal Forest of Paraná State*	9.2	2
	Protection of the Atlantic Coastal Forest of Minas Gerais	7.7	1

CAR	*Rural Development, Ouham-Pendé, Phase I*	*3.1*	*4*
	Rural Development, Ouham-Pendé, Phase II	*2.6*	*4*
Chad	*Labour-intensive Road Renewal*	*4.1*	*4*
Colombia	*Suburban Rehabilitation, Bogotá (SUR)*	*5.1*	*3*
	Suburban Rehabilitation, Bogotá (ATP)	*2.0*	*3*
Georgia	*Work Creation Programme in the Area Surrounding the Borjomi-Kharagauli National Park*	*2.6*	*3*
Ghana	*District Capitals II*	*5.1*	*4*
Macedonia	*Social Infrastructure Programme I*	*8.2*	*3*
	Social Infrastructure Programme II	*5.1*	*3*
Madagascar	*Environmental Action Plan Ia (Main Phase)*	*4.4*	*2*
Mauritania	*Municipal Development and Decentralisation I*	*1.3*	*4*
Nepal	*Rural Infrastructure/Food for Work*	*1.0*	*2*
Nicaragua	*Sustainable Natural Resource Management BOSAWAS*	*2.6*	*4*
Sri Lanka	*Post-Tsunami Housing Reconstruction and Rehabilitation Programme (TS)*	*10.0*	*2*
Economic infrastructure – energy			
Egypt	*Wind Farm Zafarana I*	*33.2*	*2*
	Wind Farm Zafarana II	*20.5*	*2*
	Wind Farm Zafarana III	*20.5*	*2*
Georgia	*Power Rehabilitation Project I*	*7.4*	*1*
	Power Rehabilitation Project II	*12.8*	*1*
India	*Promoting Renewable Energies via IREDA*	*35.8*	*2*
Mozambique	*Rehabilitation of Local Grids (Medium and Low Voltage) in Nampula und Nacala*	*8.8*	*2*
	Repair of 110 kV Transmission Line Nampula-Nacala	*8.7*	*2*
Nicaragua	*Rehabilitation and Expansion of Power Distribution Systems III*	*7.7*	*4*
Philippines	*Power Sector Programme III*	*13.2*	*2*
Serbia	*Rehabilitation of District Heating Systems in Belgrade, Novi Sad and Niš, Phase I*	*7.7*	*2*
	Rehabilitation of District Heating Systems in Belgrade, Novi Sad and Niš, Phase II	*9.7*	*2*
Tanzania	*Programme to Boost Energy Efficiency*	*6.2*	*4*
Turkey	*Flue Gas Desulphurisation Plant in Orhaneli*	*15.5*	*3*
	Flue Gas Desulphurisation Plant in Yatagan	*22.9*	*4*
Economic infrastructure – transport			
China, PR	*Electrification of the Harbin-Dalian Railway Line*	*91.7*	*1*
	Rail Transport Programme II	*26.7*	*2*
	Rail Transport Programme III (Electrification of the Chongqing-Huaihua Line)	*28.6*	*1*
Egypt	*Improvement of Freight Transport in Egyptian National Railways (ENR)*	*25.6*	*4*

Ghana	*Sectoral Adjustment Programme – Roads*	*23.7*	*3*
Laos	*National Road No. 6 Rehabilitation*	*8.3*	*2*
	National Road No. 6 Rehabilitation II	*4.6*	*2*
	National Road No. 6 Rehabilitation, Phase II	*4.0*	*2*
Namibia	*Trans-Caprivi Highway III*	*8.9*	*2*
	Rehabilitation of Mururani Gate-Rundu Highway	*7.7*	*2*
	Labour-intensive Road Construction	*6.1*	*2*
	Rehabilitation of Ondangwa-Oshikango Highway	*5.1*	*2*
Turkey	*Bursa Tramway I*	*74.3*	*2*

Projects included in the sample evaluated ex post. You can find a list of all projects ready for evaluation (population) and the sample on a yearly basis at www.kfw-entwicklungsbank.de/DE_Home/Evaluierung/index.jsp. Note: the list is available only in German.

Further projects evaluated ex post. Though not included in the sample, these projects were part of the population and evaluated ex post in 2009/2010, either because they were closely linked to the results chains of projects in the sample, or because they were of special interest for some other reason.

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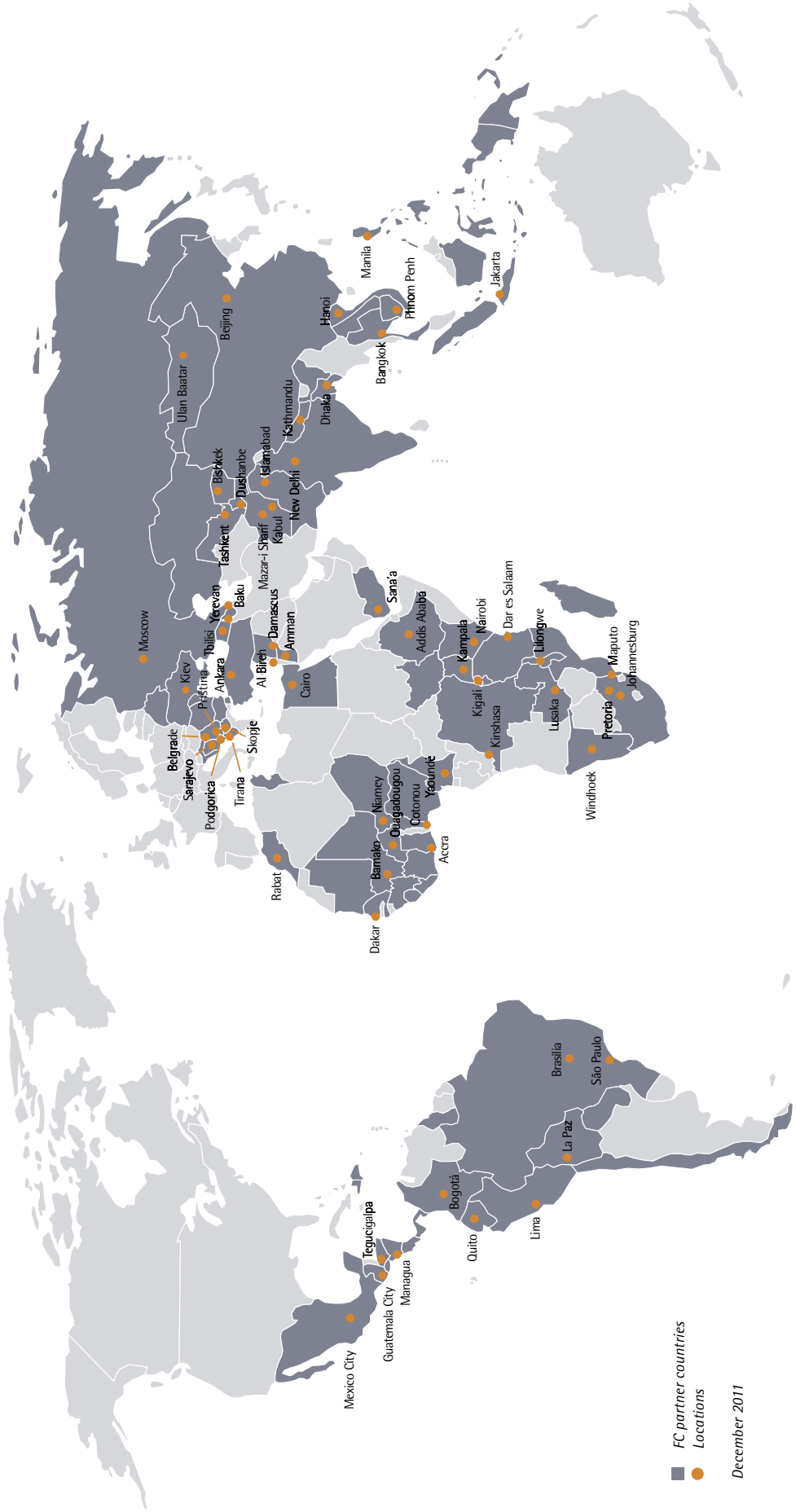

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