



Paving ways.

Developing potential.

Ninth Evaluation Report (2004/2005) on Projects  
and Programmes in Developing Countries.

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# PREFACE.

Once again, as in 2006, the 2007 German development budget is set to increase far more than the federal budget. This shows that the German federal government takes its share of global responsibility and the graduated EU plan for development co-operation seriously. These funds are investments in the future – for justice, peace and poverty reduction.

However, our aim is not merely to spend more but also to ensure that this enables us to achieve success. A key contribution is made by the systematic ex post evaluations conducted by KfW Entwicklungsbank to assess the developmental efficacy of Financial Cooperation measures. This is a perfect example of the connection between independent assessments and deriving lessons for the future.

The latest biennial report does not merely provide documentary evidence of the ongoing high level of efficacy of German Financial Cooperation; it also suggests how this efficacy can be increased further still. For us in the donor community, that means, first of all, that we must focus even more on improving the underlying sectoral and institutional conditions – through dialogue with our partners and coherent offers of support. Second, wherever possible and appropriate, we must insist on greater participation by the local population in planning, implementing and running the projects – whether this takes place directly at the individual project level or indirectly via the promotion of decentralisation and good governance. Third, it is apparent that where local executing agency structures are weak, we can usually only achieve a sustainable impact by simultaneously promoting their financial and institutional efficiency.

This report also confirms that the federal government has made the right choice in the developmental priorities that it has set itself for the current legislative period. We will only be able to bring about a number of the possible improvements referred to in the report by better consolidating the various development cooperation instruments – while at the same time enhancing flexibility. We will therefore be working towards greater harmonisation of the various methods of assessing developmental efficacy used by the different institutions and will be taking a critical look at the overall development cooperation picture.



Heidemarie Wieczorek-Zeul

Heidemarie Wieczorek-Zeul  
Federal Ministry for Economic Cooperation and Development



# FOREWORD.

The Ninth Evaluation Report provides concise information about the Financial Co-operation projects that were evaluated ex post in 2004/2005. The evaluations carried out by the independent evaluation unit at KfW Entwicklungsbank show that, despite the difficult underlying conditions in many of our partner countries, most of the projects that we support were brought to a very successful conclusion.

In this report special attention has been paid to presenting the connection between individual project risk and the success rate achieved. Being aware of this connection allows the success rate achieved to be put into perspective.

Of course, we launch every project expecting it to reach a successful conclusion. Every failure is therefore a disappointment to us. However, anyone who wants to achieve developmental success also has to be willing to take risks. Alongside our advisory function and the provision of funds, the willingness to accept these risks is a key element of our promotional activities. The quality of our work is evident from the fact that we conduct a professional analysis of the risks before a project starts and keep them within acceptable limits by designing the project in an appropriate manner.

The fact that the 71% success rate almost perfectly matches the anticipated figure computed before the start of the projects shows that KfW Entwicklungsbank identified the risks correctly and enabled the German federal government to take a responsible financing decision which consciously accepts the calculated risk.

The focus of the Ninth Evaluation Report is on transport; a special chapter analyses the risks and opportunities of FC projects in that sector. The independent evaluation unit at KfW has found that the poverty reducing effects of transport projects are usually underestimated rather than overestimated. This underlines the importance of the recent international donor initiatives to expand infrastructure support. The basis for this decision is the vital realisation that in many countries a vast improvement in the transport infrastructure is an essential precondition for achieving the Millennium Development Goals.

This report contains a large number of figures but ultimately we are less concerned with figures than with the people in our partner countries and with helping to sustainably reduce or eradicate poverty. The many case studies in this report help to keep our focus on a practical level.

I would like to thank the independent evaluation unit for its valuable advice, which enables us to improve our work even further.



Wolfgang Kroh

A handwritten signature in blue ink that reads "Wolfgang Kroh".

Wolfgang Kroh  
Member of the Board of Managing  
Directors of KfW Bankengruppe

# SUMMARY.

Acting on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), KfW Entwicklungsbank provides nearly EUR 2 billion a year in support for projects in developing countries. Is this money well invested? The ninth Evaluation Report published by KfW Entwicklungsbank shows that, despite high risk and underlying conditions that are often problematic, the projects for which financial support is provided work very successfully. The main outcome of the recent summary evaluation report prepared by the independent evaluation unit at KfW is that 71% of the projects evaluated ex post in 2004 and 2005 are classified as developmentally successful. A success rate of 71% is a good result by international comparison, too. Measured in terms of the volume of funds invested, as many as 76% of the projects were successful. The results are thus close to the long-term average success rate of all KfW development projects.

In order to determine their developmental efficacy, around three to five years after the promotional measures have been completed, all projects given support under Financial Cooperation (FC) are subjected to a thorough ex post evaluation that is usually conducted on site. The independent evaluation unit at KfW (FZ E) is in charge of these evaluations and reports directly to the member of

the Board of Managing Directors responsible for KfW Entwicklungsbank.

**Chapter 1** presents the statistical results of the evaluation. In 2004 and 2005 a total of 177 FC projects in 57 countries were evaluated. In all, EUR 6,335 million was invested in these projects, with EUR 2,265 million being provided from budget funds. In addition, KfW Entwicklungsbank provided EUR 359 million of its own resources. With EUR 3,711 million, our partner countries supplied the lion's share of the funding.

Financial Cooperation helps partner countries to overcome development bottlenecks that they cannot remove on their own. On behalf of the BMZ, KfW Entwicklungsbank provides assistance, for example, in building primary schools and primary health stations, in improving energy and drinking water supply, in establishing or expanding transport systems as well as in promoting "soft" development factors such as the rule of law, competition, transparency and participation. Developing well-functioning financial markets is a key instrument in enabling poor people to become economically active. The overarching objective of the support is broad and sustainable poverty reduction in the partner countries.

Support is provided in the form of financial resources and advice and by risk sharing. Risks arise primarily from the difficult underlying political, social, macroeconomic and sectoral conditions, which are typical structural features of many developing countries. Against this background it is important for an appropriate analysis and evaluation of opportunities and risks to be carried out at the start of the project. KfW Entwicklungsbank clearly does this quite well as the success rate achieved in the period under review almost exactly matches the risk estimates presented when the original decision to provide support was taken. As a rule, the risks are very consciously taken into account and weighed against the high developmental efficacy expected if the project is successful.

**Chapter 2** of this Evaluation Report focuses on the experience we have gained in transport projects. In terms of their number (21%) and of the volume of FC funds invested (44%), transport projects constitute the sectoral emphasis of the projects evaluated ex post in 2004/2005. The main findings of this special analysis are summarised below.

The effect of transport projects on poverty is often underestimated. Almost all evaluated projects have sub-





stantial poverty reducing effects. Projects with a direct impact on the target group, such as laying rural tracks, bring about a direct and substantial improvement in the living conditions of the people in the surrounding area. They make it easier for them to get to markets and to educational and health facilities and thus secure income, create new sources of income and make the supply system more reliable. Projects involving, for example, the development of ports or the improvement of trunk roads or railway connections have an indirect impact through the promotion of broad economic growth. Both types of projects have a developmental and poverty reducing impact. When new projects are assessed, decisions should therefore be founded less on project type (direct versus indirect poverty reduction) than on the project's problem-solving potential.

However, the evaluations carried out also show that there is scope for enhancing the effectiveness of both types of project. In projects with a direct impact on the target group and a strong regional orientation, the recommendation is that, first and foremost, an in-depth analysis of the local causes of poverty and the local development potential, close coordination with other development initiatives in the same region and a project design that is specifically geared to poverty reduction are part of the process. In the case of projects which promote economic growth and therefore tend to have an indirect impact on the target group, the key to success usually lies in creating appropriate sectoral incentives structures for the transport infrastructure to operate efficiently. In the transport sector, services are frequently still in the hands of national operators which carry out both operational and regulatory tasks (e.g. state railways, port authorities, road ministries). They frequently fail to ensure cost-effective operation. The resulting financing problems lead not infrequently to insufficient maintenance, which can jeopardise or even ser-

iously undermine the sustainable success of the project and the entire system. Involving the private sector more in infrastructure operation has led in some projects – as a result, for example, of outsourcing road maintenance, concessioning railways or ports and/or introducing performance-related remuneration – to more favourable transport tariffs, quicker and safer transport connections, more extensive transport services and a greater self-financing ability in the sector. Current and new transport projects should be systematically checked for these potential opportunities to increase developmental effectiveness.

In **Chapter 3**, a detailed cross-sectoral analysis of the projects that were classified as developmentally unsuccessful confirms that the risks arise primarily from inadequate efficiency on the part of the project executing agency or operator. Unfavourable sectoral conditions and deficiencies or problems in the environment of the target group are further important causes of insufficient developmental efficacy. In-depth analysis of project executing agencies, supplementary measures to enhance project executing agencies, gathering international promotional efforts together into sector programmes with a more far-reaching sector dialogue and, in projects with a direct impact on the target group, greater participation by target groups in project planning, implementation and operation are all ways of containing risk.

Taking examples of current projects in various sectors, **Chapter 4** illustrates differences in the developmental efficacy and evaluation of FC projects.

The **Annex** contains a sectoral breakdown of all 177 projects that were given a final evaluation in 2004 and 2005; the success rating of each project is given. In addition, the evaluation method used by KfW Entwicklungsbank, the success rating criteria and the success ratings are explained in greater detail.



# 1. OVERALL EVALUATION.

## OUTLINE: OVERALL PERFORMANCE.

Of the 177 projects submitted to ex post evaluation in 2004 and 2005, 125 (71%) were rated developmentally successful. In relation to the funds invested this was a share of 76%.

As FC projects often address very complex development problems and are often carried out in a difficult environment (consciously taking a relatively high calculated risk), the success rate is a good achievement. It is slightly lower than the result reported in the Eighth Evaluation Report but generally reflects the long-term average. The Annex gives a detailed explanation of the evaluation methods underlying this analysis and the standards applied.

The success rates, which are determined biennially, fluctuate around the average but fail to demonstrate a clear positive or negative trend over time. This is because the number of ex post evaluations is relatively low for statistical calculations. Overall, the success rate has remained steady on a good level since 1988.

In the evaluation period 2004/05 we rated 125 projects as developmentally successful. Around EUR 1,721 million in FC funds were committed to these projects. We rated 15 of these 125 successful projects as having had an unqualified positive impact (performance rating 1). A total of 63 projects were given the performance ratings 1 and 2 ("very good", "good" and "satisfactory" developmental efficacy) and a further 62 projects were given the performance rating 3 ("overall sufficient" developmental efficacy).

Measured against the volume of FC funds invested, most projects (around 47%) achieved performance rating 2.

We rated 52 projects accounting for a volume of around EUR 545 million in FC funds as unsuccessful overall. Of these, 30 still reached level 4 ("insufficient" performance), representing just under 60%. These projects did have substantial development impacts but these impacts failed to justify a positive rating. Twenty-one projects with an FC financing volume of EUR 196 million (8.6%) were rated as having "insufficient" developmental efficacy (rating 5). Only one project was rated 6, a total failure (see Chapter 4, Project examples, p 60).

## CHARACTERISATION OF THE PROJECTS SUBJECTED TO EX POST EVALUATION IN 2004/05.

In relation to the number of projects evaluated, **social infrastructure** (education, health care, population policy, water supply and sanitation/waste disposal, state and civil society and other social services) and **economic infrastructure** (transport and storage, communications and energy generation and supply) each accounted for around one-third of the 177 projects evaluated in 2004/05. The remaining projects were in the **financial sector** and in the **producing sector**, and some were **cross-sectoral projects**. More than half the FC funds (56%) were invested in economic infrastructure projects. Most of the projects evaluated in the past two years were in Africa, followed by Asia and Latin America. Owing to several un-

## OVERALL DEVELOPMENTAL RESULT FOR 2004/2005.

Performance	Rating	Number of projects Absolute	FC volume in EUR million Absolute	FC volume in EUR million In %
Very good and good	1	15	8.5	91.9
Satisfactory	2	48	27.1	1,070.4
Overall sufficient	3	62	35.0	558.5
<b>Successful</b>	<b>1–3</b>	<b>125</b>	<b>70.6</b>	<b>1,720.8</b>
Overall slightly insufficient, despite positive impact	4	30	16.9	346.9
Insufficient	5	21	11.9	196.1
Failure	6	1	0.6	1.6
<b>Unsuccessful</b>	<b>4–6</b>	<b>52</b>	<b>29.4</b>	<b>544.6</b>
<b>Total</b>	<b>1–6</b>	<b>177</b>	<b>100.0</b>	<b>2,265.4</b>
				<b>100.0</b>



Bolivia – Earthquake Relief.

usually large economic infrastructure projects (particularly in Asia), the regional distribution of funds differs substantially from the regional distribution of projects. The Annex contains a list of all projects and their performance ratings (see page 66 ff).

The projects evaluated in the reporting period 2004/05 reflect neither the sectoral nor the regional composition of the current portfolio of KfW Entwicklungs-

bank. The reason is that, on average, ex post evaluations are not performed until ten years after project appraisal or three to five years after project completion. Only after a certain time lag will the changes in the developmental orientation of German Financial Cooperation of the past ten years, particularly the sectoral composition of the FC portfolio, be reflected in the portfolio of ex post evaluations.

**CHART 1: SUCCESS RATES FOR THE YEARS 1988 TO 2005.**

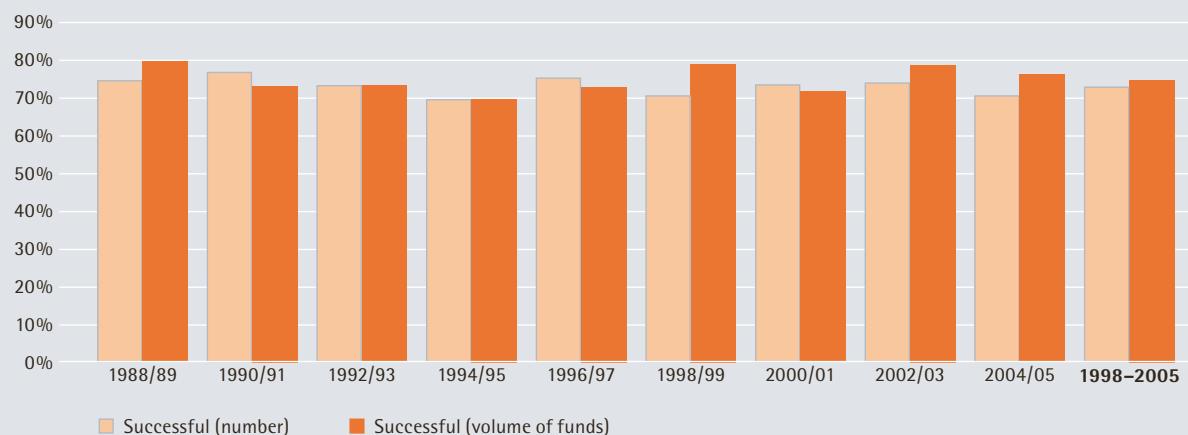


CHART 2: PORTFOLIO OF THE NINTH EVALUATION REPORT BY SECTOR.

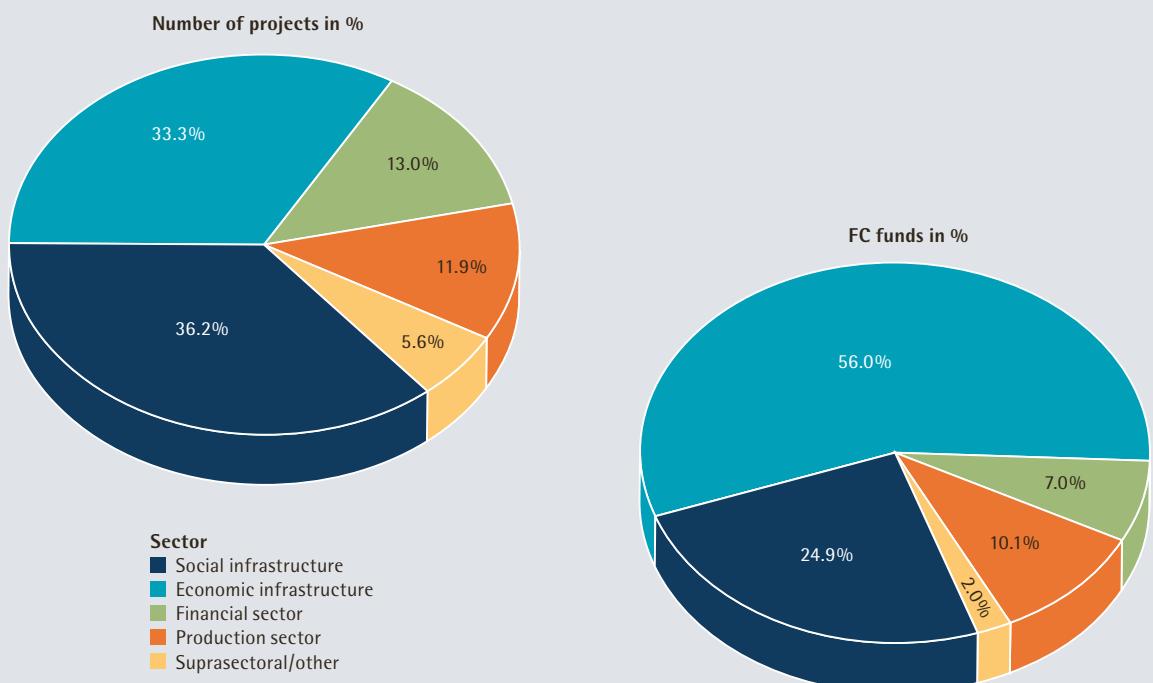
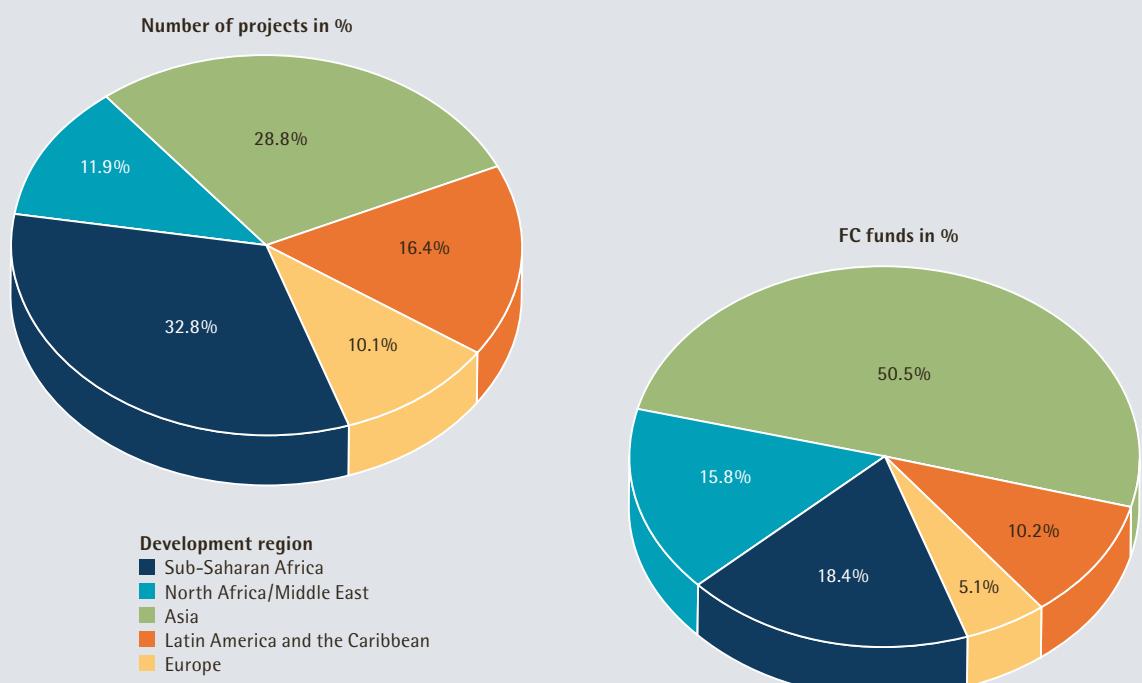


CHART 3: PROJECT PORTFOLIO OF THE NINTH EVALUATION REPORT BY REGION.



## EX POST EVALUATION IN FC.

Ex post evaluations are performed on all FC projects to determine their developmental efficacy approximately three to five years after the conclusion of the external support measures. The key evaluation criteria are sustained effectiveness, significance/relevance, and efficiency. This comprises the assessment of all desired and undesired project impacts relevant to success, such as microeconomic and macroeconomic, socio-economic and cultural, poverty-related, ecological and gender-specific impacts. The ex post evaluation is usually conducted on site in the developing country. The results of the individual evaluations are compiled in a report every two years. The present evaluation report contains the results of the ex post evaluations performed in 2004 and 2005.

### SOURCES OF FUNDS.

The **total investment costs** of the projects evaluated in the period 2004/05 amounted to around EUR 6,335 million. The partner countries contributed EUR 3,711 million to the financing of the investment costs (58.6%). Budget funds of EUR 2,265 million (35.7%) were made available, complemented by funds raised by KfW Entwicklungsbank

in the sum of EUR 359 million (5.7%). The average amount of FC funds available for each project was EUR 14.8 million. The complementary funds provided by KfW Entwicklungsbank represent an important element of financing in many FC projects and were often what enabled them to be implemented at all. These complementary funds usually focus on economic infrastructure projects (energy and transport) and the financial sector.

Dominican Republic – Social Investment Fund Pro Comunidad.



### ARE MORE RECENT PROJECTS MORE SUCCESSFUL THAN OLDER ONES?

The success rate presented above is calculated on the basis of all evaluations completed in the two-year period. It contains projects that operated over very long periods as well as short-term projects. The oldest project in the present report, for example, was started back in 1981. However, the report also covers projects that were not started until the beginning of this century.

KfW Entwicklungsbank's evaluation unit therefore examined whether the projects that were started earlier had a higher or lower success rate than those started in later years. No significant differences or trends have become apparent. Projects conceived in the 1980s or early 1990s tend to be just as successful as those that were begun later.

Successful projects generally tend to have a significantly shorter implementation period (around 5.3 years) than unsuccessful projects (approximately 7.1 years). More complex (and, hence, riskier) projects are planned for a longer implementation period from the outset. The longer implementation period of critical projects is also explained by the fact that additional efforts are often made to put them back on track.

**SUCCESSFUL PROJECTS BY SECTOR**  
**OVERALL PERFORMANCE BY SECTOR – NUMBER OF PROJECTS.**

Sector	1st–8th Evaluation Report (1988–2003)			9th Evaluation Report (2004/2005)		
	Number of projects		In %	Number of projects		In %
	Total	Successful		Total	Successful	
<b>Social Infrastructure</b>	<b>311</b>	<b>238</b>	<b>76.5</b>	<b>64</b>	<b>48</b>	<b>75.0</b>
Education	25	25	100.0	15	13	86.7
Healthcare	42	33	78.6	7	4	57.1
Population policy	18	18	100.0	6	5	83.3
Water/sanitation	192	134	69.8	27	17	63.0
State/civil society/other	34	28	82.4	9	9	100.0
<b>Economic infrastructure</b>	<b>527</b>	<b>401</b>	<b>76.1</b>	<b>59</b>	<b>45</b>	<b>76.3</b>
Transport	279	196	70.3	37	29	78.4
Communications	49	44	89.8	2	2	100.0
Energy	199	161	80.9	20	14	70.0
<b>Financial sector</b>	<b>106</b>	<b>71</b>	<b>67.0</b>	<b>23</b>	<b>16</b>	<b>69.6</b>
<b>Production sector</b>	<b>276</b>	<b>170</b>	<b>61.6</b>	<b>21</b>	<b>9</b>	<b>42.8</b>
Agriculture, forestry, fishery	179	117	65.4	20	9	45.0
Manufacturing, mining, construction	97	53	54.6	1	0	0.0
<b>Suprasectoral/structural aid</b>	<b>99</b>	<b>86</b>	<b>86.7</b>	<b>10</b>	<b>7</b>	<b>70.0</b>

**OVERALL PERFORMANCE BY SECTOR – FC VOLUME.**

Sector	1st–8th Evaluation Report (1988–2003)			9th Evaluation Report (2004/2005)		
	FC Volume (EUR million)		In %	FC Volume (EUR million)		In %
	Total	Successful		Total	Successful	
<b>Social Infrastructure</b>	<b>2,793.7</b>	<b>2,188.3</b>	<b>78.3</b>	<b>562.6</b>	<b>414.7</b>	<b>73.7</b>
Education	361.8	361.8	100.0	150.4	132.5	88.1
Healthcare	268.9	196.8	73.2	55.9	33.5	60.0
Population policy	175.6	175.6	100.0	50.4	42.7	84.8
Water/sanitation	1,737.4	1,229.3	70.7	232.4	132.3	57.0
State/civil society/other	249.9	224.7	89.9	73.6	73.6	100.0
<b>Economic infrastructure</b>	<b>8,349.9</b>	<b>6,555.1</b>	<b>78.5</b>	<b>1,268.7</b>	<b>1,059.7</b>	<b>83.5</b>
Transport	3,202.1	2,251.2	70.3	1,001.3	865.9	86.5
Communications	617.2	576.8	93.5	11.8	11.8	100.0
Energy	4,530.7	3,727.0	82.3	255.5	181.9	71.2
<b>Financial sector</b>	<b>863.2</b>	<b>589.7</b>	<b>68.3</b>	<b>160.6</b>	<b>114.5</b>	<b>71.3</b>
<b>Production sector</b>	<b>3,909.3</b>	<b>2,370.7</b>	<b>60.6</b>	<b>229.2</b>	<b>102.4</b>	<b>44.7</b>
Agriculture, forestry, fishery	1,984.4	1,341.3	67.6	217.1	102.4	47.1
Manufacturing, mining, construction	1,924.8	1,029.3	53.4	12.0	0.0	0.0
<b>Suprasectoral/structural aid</b>	<b>974.1</b>	<b>853.8</b>	<b>87.6</b>	<b>44.2</b>	<b>29.5</b>	<b>66.7</b>



Namibia – Trans Caprivi Highway.

### SECTOR-RELATED DIFFERENCES IN SUCCESS RATES.

The analysis by sector has shown that transport projects were the heavyweight of the portfolio evaluated in 2004/2005, both in numerical terms (21%) and in terms of the volume of FC funds committed (44%). The success rate of the transport projects covered by the evaluation period was above their long-time average both in number and in volume of funds. Other priorities were the financial sector and agriculture as well as education, water supply/

sanitation and energy. While the success rate of the financial sector projects was slightly above their long-term success rates, the other four sector priorities were more or less significantly below their historic success rates (see Tables, p 11).

### OVERALL PERFORMANCE BY REGION.

**Asia** received the highest volume of FC commitments in the evaluated portfolio. This region, which is home to most of the world's poor, took the greatest share of FC funds in

### OVERALL PERFORMANCE BY REGION – NUMBER OF PROJECTS.

Sector	1st–8th Evaluation Report (1988–2003)			9th Evaluation Report (2004/2005)		
	Total	Successful	In %	Total	Successful	In %
Europe	80	64	80.0	18	15	83.3
Asia	332	254	76.5	51	35	68.6
Sub-Saharan Africa	608	438	72.0	58	38	65.5
North Africa/Middle East	161	101	62.7	21	12	57.1
Latin America/Caribbean	138	109	79.0	29	25	86.2
<b>Overall result</b>	<b>1,319</b>	<b>966</b>	<b>73.2</b>	<b>177</b>	<b>125</b>	<b>70.6</b>

the past, too. In relation to the volume of FC commitments, the projects in this region which were evaluated in 2004/05 achieved an above-average performance rating compared to earlier years. In relation to the number of projects in the region, Asia's performance rating was slightly below the long-term average.

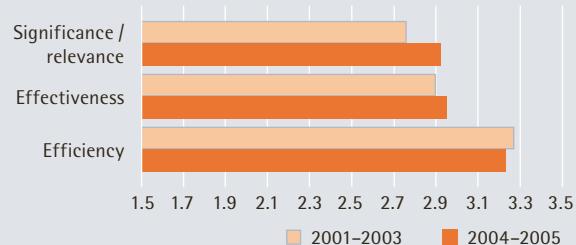
**Sub-Saharan Africa** was the main region in terms of the number of evaluated projects. Here, too, the performance rating was up slightly against the long-term average in relation to the volume of FC commitments while it remained below the long-term average rating achieved in terms of the number of projects (see Tables, pp 12–13).

### RATING THE INDIVIDUAL PERFORMANCE CRITERIA.

The average rating given to the projects evaluated in 2004/2005 was 2.98, dipping slightly below the long-term average of 2.87. It is also interesting to review the three individual criteria of relevance/significance, effectiveness and efficiency. These are evaluated on a scale from 1 to 6, as is the overall rating, and then weighted on the basis of the project specifics and aggregated into a total score. In the aggregation of individual ratings it must be borne in mind that insufficient effectiveness or relevance/significance is always bound to lead to an insufficient overall project rating.

From a separate analysis of results by these three sub-ratings it is apparent that the two criteria of relevance/significance and effectiveness obtained quite similar ratings in the period 2004/05. The average rating for the criterion of relevance/significance was 2.92, while the

### EVALUATION OF PROJECTS BY SUB-CRITERIA.



rating for effectiveness was 2.95. In contrast, the average rating for efficiency was significantly poorer, at 3.23. This striking difference was also apparent in earlier evaluation years.<sup>1</sup> While the average ratings for effectiveness and efficiency roughly correspond to the average ratings given in 2001 and 2003, the ratings given for significance/relevance have tended to deteriorate compared with that period of evaluation (see Chart, p 13).

### THE SUCCESS RATE REFLECTS THE RISK PROFILE OF THE FC PROJECTS.

Good development cooperation is one that supports partners in developing countries in overcoming development obstacles which they cannot manage alone. German Financial Cooperation supports partner countries by providing funds and advice and entering into risk partnerships with the project partners.

<sup>1</sup> The scores were not systematically differentiated by individual evaluation criteria until 2001.

### OVERALL PERFORMANCE BY REGION – FC VOLUME.

Sector	1st–8th Evaluation Report (1988–2003)			9th Evaluation Report (2004/2005)			
	FC Volume (EUR million)	Total	Successful	In %	FC Volume (EUR million)	Total	Successful
Europe	1,660.0	1,179.3	71.4	71.4	115.8	84.2	72.7
Asia	5,526.1	4,473.8	81.0	81.0	1,145.7	963.3	84.1
Sub-Saharan Africa	4,641.2	3,123.3	67.3	67.3	415.4	287.9	69.3
North Africa/Middle East	3,645.3	2,618.8	71.8	71.8	356.8	197.3	55.3
Latin America/Caribbean	1,417.6	1,162.3	82.0	82.0	231.7	188.2	81.2
<b>Overall result</b>	<b>16,890.2</b>	<b>12,557.5</b>	<b>74.3</b>	<b>74.3</b>	<b>2,265.4</b>	<b>1,720.8</b>	<b>76.1</b>



Bolivia – Social Investment Fund I.

Risks result from the often difficult underlying political, social, macroeconomic and sectoral conditions, which are actually structural features of many developing countries. It is a particular characteristic of FC projects that they support measures and investments which often have a deep impact on complex development processes. This increases the risks but also improves the development prospects.

What is important is to accurately analyse and assess the opportunities and risks at the start of a project so that a responsible decision can be taken on whether to finance it (calculated risks). All FC projects subjected to an appraisal undergo an in-depth analysis and are classified according to four risk categories – from low to very high. The risk categories are based on probability values for

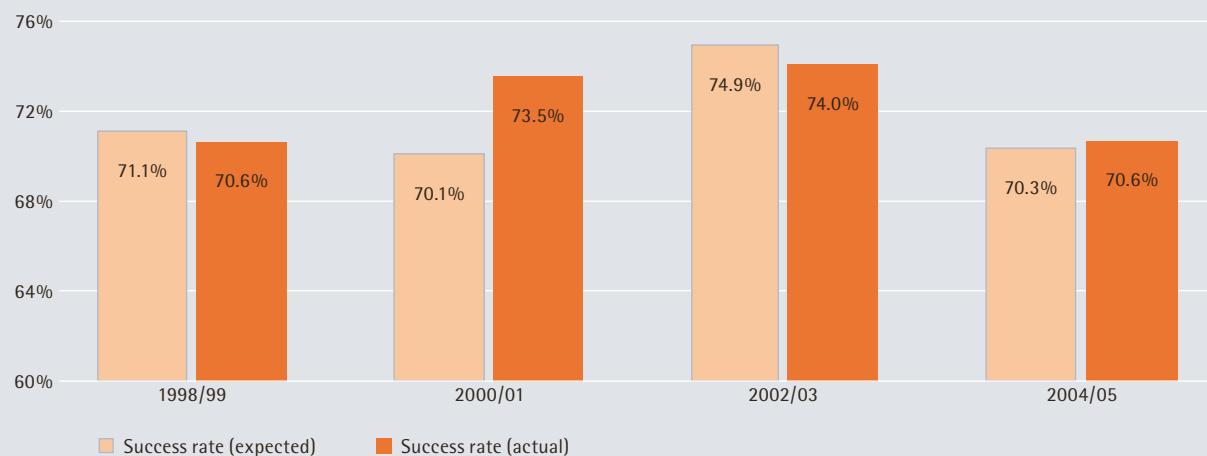
project success. These are used to calculate an anticipated success rate.

The projects evaluated in the past two years were expected to achieve a success rate of 70.3% (in reference to their number) at the time the financing decision was taken. This value almost exactly matches the success rate of 70.6% that was actually achieved. Analyses of earlier evaluation years confirm that the success rates achieved and their fluctuations can be explained relatively well by the risk structure of the projects evaluated.

These analyses show that the subsequent success rate is heavily influenced by the risk propensity that existed at the time the financing decision was taken. As different sectors and regions are known to achieve different success rates, the overall performance outcome can also be controlled to a certain extent by the commitment planning of the BMZ. For example, concentrating commitments more strongly on the primary education sector, which achieves above-average successes, could increase the success rate in nominal terms. However, primary education alone is not enough to solve most partner countries' development problems. These often require investment in areas such as health care, drinking water supply and business development, even if the risks to success are higher there.

Overall, the success rate is only a very rough measure of the developmental efficacy of projects. It distinguishes only between "successful" and "unsuccessful" projects but fails to reflect the vastly different impacts that exist within these two groups of projects. In theory, a

#### EXPECTED AND ACHIEVED SUCCESS RATE.





Pakistan – Children's Hospital Quetta.

success rate of 65% may even reflect more development impacts than a success rate of 85%. Such a case can occur, for instance, if the 65% share comprises projects with an above-average efficacy and the 85% comprises mostly projects that have only just achieved sufficient efficacy. In other words, the success rate as a measure of the developmental quality of projects must be interpreted with caution.

#### **HOW DOES THE FC SUCCESS RATE COMPARE ON AN INTERNATIONAL SCALE?**

As evaluation methods and standards as well as definitions of success and target levels differ from one development cooperation agency to another, it is difficult to make a direct comparison of their success rates. The success rate is a very simple but also a very rough gauge for measuring the efficacy or quality of development aid. Within the two groups of successful and unsuccessful projects there is a wide range of projects of higher or lower quality or efficacy. The success rate of KfW Entwicklungsbank is currently higher than that of almost all other DC agencies that publish their success rates (such as the World Bank, the

Asian Development Bank, the Agence Française de Développement and the British Department for International Development). Given the risk profile of the FC portfolio, strict definitions of success, high sector target levels and an independent ex post evaluation of all FC projects undertaken three to five years after the support is completed, we consider that KfW Entwicklungsbank has achieved a good overall success rate.

#### **CONSTANT SUCCESS RATE – NOTHING LEARNED?**

The relative consistency of the success rate over time actually conceals great structural shifts. For example, institutional learning very clearly comes to light through the changes made to the sector composition of the FC portfolio. Some sectors that used to achieve clearly below-average success rates in earlier years (e.g. industrial projects such as cement factories or steelworks) are no longer being supported under Financial Cooperation. Removing the "low performers", however, has not brought about any fundamental improvements in the risk structure because new sectors have been included that are likewise

fraught with considerable risk but very relevant to development (such as social marketing, the protection of natural resources, renewable energies, sewage treatment and decentralisation). Much has changed within the sectors as well. In the financial sector the model of state development banks which was often unsuccessful in the past has been replaced by new approaches such as microfinance, which have even achieved an above-average development performance.

Overall, the current portfolio shows a trend towards riskier projects with high potential for efficacy, which is likely to cause the success rate to dip slightly over the medium term.

#### WHAT CAUSES FC PROJECTS TO FAIL?

Despite the good success rates and the realistic assessment of risks, it is worthwhile examining the projects that failed to achieve sufficient developmental efficacy in order

to learn from the negative experiences. For this purpose the evaluation unit at KfW Entwicklungsbank performed a more in-depth analysis of weaknesses of the projects evaluated in 2004 and 2005. The results generally confirm the patterns followed in trying to explain project failures, which have thus far been based primarily on individual knowledge and experience. Most of all, they permit quantitative statements to be made on the frequency and intensity of individual determining factors.

The analysis revealed that particular weaknesses in the project executing agency's capabilities were common to around 95% of all failed projects. Inadequate personnel qualifications, deficiencies in organisation and procedures, lack of internal efficiency and poor leadership on the part of the management led to negative consequences affecting the quality of the products or services provided and the project executing agency's profitability. Weak sector conditions also had strong negative impacts on around

Palestinian Territories – Employment Programme (school construction).





Nicaragua – Social Investment Fund FISE III.

three-quarters of all unsuccessful projects. Projects were prevented from achieving their objectives by state interventionism (often consisting in setting tariffs that failed to cover costs), inadequate legal provisions or misguided sector spending priorities. Weaknesses in relation to the target group or in reaching the target group were the third main cause of project failure. In nearly half of all failed projects the project output failed to match the target group's priorities fully or sufficiently. The target group was unable to derive the expected benefits from it (partly owing to knowledge deficits, attachment to behaviours handed down from the past or insufficient self-help poten-

tial). In contrast, macroeconomic conditions and force majeure were relatively seldom the direct cause of failure.

In many cases the causes of failure described above do not occur independently. Unfavourable macroeconomic or sector conditions, for example, often lead to unprofitable operation of the project executing agency. The present analysis, however, attempts to identify the actual cause and not its consequential impact as reason for failure. Details of the results, project examples and explanations of the methodology of the analysis of weaknesses are contained in Chapter 3.

On the homepage of KfW Entwicklungsbank (section "Evaluation") we offer abbreviated versions of all ex post evaluations. You also find the evaluation reports of the past years, a list of currently planned ex post evaluations, papers on the sustainability of FC projects and a lot more under [www.kfw-entwicklungsbank.de/EN\\_Home/Evaluation](http://www.kfw-entwicklungsbank.de/EN_Home/Evaluation).



## 2. FOCUS: HOW EFFECTIVE ARE TRANSPORT SECTOR PROJECTS?

Anyone trying to assess the purpose and impact of transport sector projects soon comes face to face with the economic "realisation" that economic growth implies the need for an appropriate transport infrastructure. This includes roadways, railways, ports, waterways and airports as well as local public transport systems such as urban railways or underground networks. How highly developed the transport infrastructure needs to be depends, in particular, on the extent of the division of labour and market orientation of a given economic area. In remote rural areas simple roads or tracks are sufficient; in medium-sized or large towns or cities with an extensive national, regional or international division of labour, it is generally vital for the basic infrastructure of national roads to be supplemented by air, rail and possibly maritime transport links. Megacities with their vast populations would cease to function without efficient inner-city public transport systems.

In economic theory, transport projects primarily help to reduce "transaction costs" and therefore boost prosperity. Behind the abstract term "transaction costs" are concrete determining factors. For instance, if roads or railways are reliable, they achieve substantial cuts in travel times, thus reducing transport costs and the prices of products and services, too. They ensure that a region is better supplied and are crucial to its economic growth as well as to providing better access to essential social services such as schools and health centres. Even carrying out administrative tasks efficiently and participating in political processes require well-functioning transport systems.

Developing countries, in particular, frequently suffer from a transport infrastructure that does not meet their needs and that, owing to management problems, is often in a very poor state of repair. Providing support for the transport sector through Financial Cooperation can be an appropriate means of reducing these deficits and therefore of helping to overcome essential development bottlenecks.

After the individual projects have been completed, an evaluation is carried out to ascertain, among other things, whether the end result was as positive and as far-reaching as planned and the extent to which it was diminished or even outweighed by unexpected negative turns of event. Here, too, the aim is to draw on positive and negative experience to reach conclusions about the design of current and future projects.

### BASIC ASSUMPTIONS ABOUT THE SIGNIFICANCE OF THE TRANSPORT SECTOR FOR POVERTY REDUCTION.

Typically, transport sector projects do not usually generate developmental effects that are directly observable in the transport sector itself. Rather, transport is merely an instrument which can be used to eliminate or reduce key bottlenecks in a number of other highly relevant development areas (providing employment and income opportunities, ensuring access to educational and health facilities and promoting decentralisation and participation). In development cooperation, transport routes are often an indispensable precondition enabling the available potential for social and economic development to be exploited.

The transport sector had previously taken something of a back seat in development policy discussions. In recent years, however, it has been the focus of far more attention because of its potentially high significance for successful development work. This has also led to some new donor initiatives. It is now an undisputed fact that it will be virtually impossible to achieve the Millennium Development Goals – and particularly that of halving the number of poor people by 2015 – unless there is a substantial improvement in transport infrastructure.

Transport projects always have a particularly marked impact if development initiatives are already under way locally (e.g. small crafts businesses, agricultural production). However, their further development is impeded if there are no transport routes or if social services (e.g. secondary schools, district hospitals) are already in place in the region but many people have no way of getting there because there are no roads. In Asia and Africa, transport routes that cannot be used during the rainy season obstruct the economic development of entire regions. In El Salvador, which has intense economic relations with North America, the inefficiency of the most important seaport was blocking an increase in imports and exports (see Box, p 20).

However, transport sector projects have an impact not only when they respond to urgent transport needs in other sectors but also because they open up new opportunities which demand from other sectors slowly rises to meet. For example, building up a drinking water and electricity network often follows on from the expansion of transport routes. The same can be said of the influx of qualified doctors, teachers, administrators, craftsmen and

## EL SALVADOR – PORT OF ACAJUTLA.

The FC supported rehabilitation of the seaport of Acajutla, the most important port for imports and exports in El Salvador, had a direct impact on the promotion of international trade and the increase in the country's economic growth. Acajutla is a vital part of life in El Salvador. El Salvador's main export goods – coffee, sugar, textiles and fruit – are shipped via Acajutla. Imports and exports have a share of around 70% of GDP. Measured in terms of how the volume of goods and handling times for goods transhipment have developed, the project objectives were clearly exceeded. Average docking times were more than halved, to below 30 hours. Despite the 15% reduction in tariffs, the port is no longer deeply in the red and is not only making a healthy profit but has become a major taxpayer. Container handling increased fivefold from



17,721 to 92,857 units. In Acajutla the risks lay in the structural weaknesses of the public sector operator.

Because of government influence on the tariff structure, personnel policy and important management decisions, the port was labouring under too high costs and inefficient services, with ship waiting times far in excess of international standards. A reform of the port, with key tasks such as loading and unloading and maintenance services being transferred to small private businesses, has solved these efficiency problems, put the port back into the black and ensured the long-term success of the project. Ultimately, because of its significance for the country's foreign trade, this project made an essential contribution to economic development and to structural poverty reduction.



traders, all of whom are crucial to the development process. The knock-on effect of transport projects on many upstream and downstream sectors presents a particular challenge when it comes to evaluating their impact.

From the perspective of development, justification for transport projects is usually based on one or more of the following four basic assumptions about poverty reducing impact chains.

#### **Basic assumption 1:**

##### **Structural poverty reduction at the macro level.**

Extending the capacities of ports, trunk roads or railways can be a means of helping to establish the conditions for broad economic growth and poverty reduction at the national level because projects of this kind give local producers better access to national resources and international purchase and sales markets. The growth thus generated indirectly creates jobs and income, even for less well-qualified or unskilled workers. The better supply of regional and international products increases product variety and promotes price competitiveness so that many goods become affordable for poorer people. Projects of this kind can help to make public transport systems more

cost-effective to run and thus reduce the need for state subsidies. The funds that are saved can be used for initiatives particularly relevant to poverty reduction under national poverty reduction programmes (PRSP) that are frequently also supported by donors. However, they can also help to reduce budget deficits and check inflation with its negative impact on poverty. Lower transport prices mean that poor people can afford to use passenger transport and become more mobile.

#### **Basic assumption 2:**

##### **Target group oriented growth.**

Regional transport projects, such as laying access roads, allow poorer people to integrate into the national division of labour. For small businessmen, farmers and cooperatives, better transport routes open up markets which were previously very difficult to reach. It also becomes easier to procure products and services. Furthermore, workers have an opportunity to find jobs other than in agriculture. Lower transport costs and reduced travel times can make it possible for people living in poor parts of large cities to find work in the rapidly growing economic centres (see Box, p 24).

Bolivia – Labour-intensive road construction in a social fund project.



## NEPAL – MALEKHU ROAD, DHADING BESI DISTRICT.

Asphalting a road in Dhading Besi district which connects to the national road network gave the 150,000 people in a remote region far easier access to the urban centres in Nepal. The impact far exceeded expectations. Because the local people are now far more mobile and the sales markets can be reached more easily, there has been a marked increase in the production and marketing of agricultural products. Vegetable production, for example, has gone up from 12,204 tonnes (before the road was built) to nearly 50,000 tonnes in recent months. Nowadays people can also travel to the capital city of Kathmandu, do business, buy what they need and return home within a single day – all year round and regardless of the weather.



The better link to the regional road network has also meant, among other things, that the local inhabitants have been able to take jobs in regions further from home. A survey of bus passengers revealed that around 9% of the respondents were travelling because of work. The ready acceptance of the bus lines is also related to the marked reduction in the price of tickets, which has come about as a result of the improved connections and because more people now use the buses. The price of a ticket has been roughly halved and the cost of transporting goods has fallen by as much as two-thirds. As a result, there has been a significant increase in product variety in the remote region and a great improvement in access to educational and health facilities.

However, surveys among poor sections of the population also showed that the improved connection had negative consequences. As goods from other regions are now available, competitive pressure has increased and some of the local businesses have been ousted from the local market because they are not able to compete. The target group also complained that the better transport connection has led to the spread of dubious innovations (soft drinks and snacks) to the detriment of conventional goods that are often far cheaper.



Roads must be continuously maintained.

#### **Basic assumption 3:**

##### **Access to social services and participation.**

Transport projects can make it easier for poor people (frequently in remote parts of the country) to access education and health services and to participate in political decision-making processes. Basic social needs can thus be met and people can exercise their fundamental political rights.

#### **Basic assumption 4:**

##### **Direct employment effects for poor people.**

Labour-intensive construction measures in the project implementation phase can be a temporary source of income in cash or kind (food-for-work projects) for local workers.

#### **TRANSPORT PROJECTS MAY ALSO HAVE NEGATIVE EFFECTS.**

The evaluation of 40 projects conducted by KfW Entwicklungsbank in the transport sector in 2004 and 2005 has shown that the four basic impact assumptions referred to above are actually borne out in the clear majority of the cases. However, there are also cases of the expected impact not being achieved or falling short of the original aim. There have also been projects with unexpectedly negative side-effects, which undermine, or even thwart, the success of the project. For example, an improved road network can

- lead to an increase in accidents and create more dust and general environmental pollution in residential

areas close to the roads because vehicles can travel at higher speeds;

- increase competitive pressure on trade, industry and handicrafts because local markets are linked to supra-regional traffic networks, with the result that local private sector initiatives and jobs are located elsewhere or even – in the case of strong competition from imports – completely eradicated. The local manufacturing industry is particularly affected;
- force people to move away from their traditional homelands because the price of property rises when suburbs where poor people live are connected to the urban transport infrastructure;
- encourage the spread of infectious diseases (e.g. HIV/AIDS) because of transport links to remote parts of the country.

These examples, which have been taken from actual projects, show that the basic impact assumptions referred to above are anything but broadly applicable and that in each case it needs to be ascertained whether the expected development effects of transport projects actually do occur and under what conditions they are normally effective.

In the following sections the independent evaluation unit of KfW Entwicklungsbank presents the conclusions reached after evaluating 40 projects in the transport sector. These lead to practical recommendations with regard to selecting and designing new projects in the transport sector.

## CHINA – SHANGHAI UNDERGROUND RAILWAY.

The Shanghai underground can be taken as an example of how urban public transport projects can successfully support the dynamics of economic processes based on a division of labour. The extremely strong economic growth of the industrial metropolis Shanghai stretched the existing road network to the limits of its capacity within just a few years. Although Shanghai has invested heavily in its road network and

has even built two-level urban motorways, the average traffic speed is around 15 km/h. Unless it developed an efficient underground network, Shanghai – which now has a population of 18 million – was heading for collapse. With the support of KfW Entwicklungsbank, Shanghai began to construct an underground railway network. Line 1 was opened in 1995 and line 2 in 1999 – both co-financed by KfW. The two lines cover a network of 42 kilometres (total network today: 65 kilometres) and transport 1.3 million passengers a day. These two underground lines already have a share of around 15% of local public passenger transport in Shanghai and now go a long way to ensuring that people can get to their places of work in the city, thus underpinning further economic development in the region.



## THE TRANSPORT SECTOR AND ITS ROLE IN FINANCIAL COOPERATION.

Traditionally, the transport sector is one of the most important parts of German Financial Cooperation (FC). Of the 1,496 FC projects evaluated since 1988, around 21% deal with the transport sector. Also in terms of the funds committed, the share of transport projects was 22%. Within the transport sector, 44% of the projects deal with road traffic but, measured in terms of the volume of finance, rail transport (43%) is even more important (road transport: 40%).

In the period under review (2004/05) ex post evaluations of 40 transport sector projects around the world were carried out. This includes three projects from other sectors, in which most of the funds were used for the transport infrastructure – through a social fund, for example.

In addition, for six projects in-depth socio-economic studies were carried out in order to analyse the impact chains more precisely, particularly as they related to poorer sections of the population.

The success rate of the 40 transport projects is, at just under 80%, somewhat above the average for all FC promotional areas (71%).

### DEVELOPMENTAL EFFICACY OF THE PROJECTS BY SUB-SECTOR.

Rating	1	2	3	4	5	6
Sub-sector:						
Road traffic	3	6	8	2	1	
Water/ports		1	1			
Local rail transport	3					
Long-distance rail transport	1	9	5			
Total	3	11	18	7	1	

Some of the results in the different sub-sectors vary considerably: whereas most of the road, local rail transport and port projects were brought to a successful conclusion (88% with ratings 1 to 3), the success rate for long-distance rail transport projects was 67%. Most of these projects (90%) were assessed as only just sufficient (rating 3). Obviously, there are particular risks to success in the rail sector that arise mainly from the complexity of

network operation, which is usually fully in government hands (see below).

### EVALUATION OF TRANSPORT PROJECTS BY SUB-CRITERIA.

Rating	1	2	3	4	5	6
<b>Road</b>						
Effectiveness		9	8		3	
Relevance/significance	3	8	6	2	1	
Efficiency	3	6	6	4	1	
<b>Water/ports</b>						
Effectiveness		1	1			
Relevance/significance		2				
Efficiency		1	1			
<b>Local rail transport</b>						
Effectiveness			3			
Relevance/significance		3				
Efficiency			3			
<b>Long-distance rail transport</b>						
Effectiveness	1	9	5			
Relevance/significance	1	9	2	3		
Efficiency	3	11	1			

If the three unsuccessful road projects are ignored, the three sub-sectors "road", "water/ports" and "local rail transport" yield relatively homogeneous ratings. Long-distance rail transport projects are a different matter. Whereas the effectiveness (achievement of the project objective) and significance/relevance (achievement of the overall objective) are given borderline ratings that are, however, usually still adequate, the efficiency (appropriate use of funds) of most of the projects is classified as insufficient.

### DIRECT AND INDIRECT POVERTY EFFECTS ACHIEVED.

Roughly one-quarter of the projects were directly related to poverty reduction, meaning that the projects have a direct impact on poor sections of the population. All nine projects that are directly related to poverty reduction are in the road transport sector. This is partly because of their proximity to the target groups (in the case of rural roads with regional/local connections) and partly because of

the implementation concept, which involves, for example, labour-intensive construction measures with the direct impact of providing poor people with jobs. The direct income impact of project implementation even became the focal point of two emergency assistance projects.

The remaining 11 road projects and all rail and port projects had an indirect impact on poverty. If they were not geared to a specific target group, they affected the macro level via the transmission channels of structural poverty reduction. This applies to almost all rail transport and port projects and five of the trunk road projects.

The **impact** of the projects reviewed was **primarily in the following areas:**

- Nationwide reduction in transport costs and the price of goods
- Reductions in transport time
- Reduction in government subsidies (rail transport, ports)
- Foreign exchange earnings (international transport)

**The projects that were geared to specific target groups** (with the exception of three local rail projects) mostly created transport links for rural regions and **had a particularly positive impact as a result of:**

- Reduction in regional transport costs and the prices of goods
- Increase in consumer satisfaction because of the greater variety of products
- Creation of affordable mobility in regional passenger traffic
- Time saved by the regional target population

- Better access by the target population to educational and/or health facilities

It was frequently difficult to verify the expected indirect income and employment effects of the projects. In individual cases, however, the projects have caused such a strong increase in traffic and in production and trade activities that it is safe to assume that there are related positive impact chains, as was evident in the projects in the Tangail district of Bangladesh. However, there are also cases of negative side-effects such as locally made commercial goods being crowded out by cheaper imports (with corresponding negative effects on employment). Overall, during the project appraisal the poverty-reducing effects of transport projects were usually underestimated rather than overestimated.

#### SUMMARY OF THE MOST IMPORTANT RESULTS OF THE INDIVIDUAL EVALUATIONS IN THE TRANSPORT SECTOR.

##### (a) Reaching the target groups.

Most of the direct target groups were reached successfully. It did not always prove possible to involve a particularly large percentage of the poor people directly in the projects. For example, the impact analysis of a road project in Nepal confirmed that the poorer sections of the population derive relatively little benefit from the indirect income effects of a transport project when other vital production factors such as land ownership, access to loans or agricultural advice are lacking. In two other road projects in Lesotho and a rail project in Egypt, the limited economic

### LESOTHO – LABOUR-INTENSIVE ROAD BUILDING PHASES IV + V.

In Lesotho KfW Entwicklungsbank's objective was to establish road connections between remote agricultural regions, thus enabling local people, most of whom are poor, to earn an income from agriculture and giving them access to the social infrastructure. The project was not successful, however, because the lack of complementary factors such as marketing structures, access to agricultural loans and agricultural advice as well as the very difficult terrain and rain conditions hardly led to any increase in agricultural production. The expansion of the health and educational facilities needed to provide a better social infrastructure was not as extensive as anticipated. The reductions in transport costs generated by the better quality roads also failed to yield the expected traffic increase as the poorer people could still not afford the transport prices.



Nepal – Road construction benefits trade by improving transport.

potential of downstream sectors proved to be critical and thus the cause of the failure. In Lesotho the agricultural development potential of the project regions was overestimated and investment in the social infrastructure did not develop as anticipated.

In Egypt plans to repair a railway line that was used solely to supply a national steelworks with iron ore fell foul of the structural reform of the Egyptian steel industry.

By contrast, the social and economic environment of 11 other road projects provided a good basis for project success. The projects connected high-potential regions to the supraregional road network and thus contributed to achieving increases in production and marketing, particularly in Bangladesh, Bolivia and Chad. The inhabitants gained better access to education and medical care. The deeper impact analysis of the project in Nepal confirmed the importance of good transport connections for the quality of social infrastructure facilities; they made the region more attractive to qualified staff and improved the supply of medicines. Such effects are of greater benefit to poorer people, too, provided that high utilisation contributions (school fees, treatment fees) do not bar them from access to such services.

#### **(b) Underlying sectoral conditions and project executing agencies.**

In the transport sector it is not always easy to distinguish between the project executing agency or operator and the sector because the executing agency often assumes operational and regulatory tasks simultaneously, i.e. is involved to a large extent in determining the underlying conditions

in the sector. For this reason the two aspects will also be treated together in this section.

The success of transport projects is particularly dependent on local project executing agencies such as highways authorities, railway companies or port authorities ensuring appropriate use of the funds invested in the project. Most of the projects that are rated as having only a sufficient or even a poor developmental effect demonstrate weaknesses on the part of the project executing agency in the area of operation and maintenance. In the road traffic sector the cause had frequently to do with the dependence of public sector executing agencies on widely fluctuating budget allocations that were rarely fully adequate. In many cases this was due to false disbursement priorities (network expansion instead of maintaining the existing substance), as was the case in Bolivia and Burundi, for example. In addition, many executing agencies did not have the technical or organisational abilities to plan and implement investment and ensure operation and maintenance. In many cases this was also bound up with the fact that the executing agencies used their own construction teams to carry out road maintenance. However, the inflexible rules of public administration often lead to bureaucratic procedures and a shortage of incentive structures and sanctioning mechanisms against a backdrop of low wages and a low level of efficiency. As a result, the failure to spend money on maintenance reduces the life of the new infrastructure and has an adverse effect on profitability.

Essentially, these problems have a more serious impact on rail transport than those in the road traffic sector.

## CHAD – BETTER ROADS INCREASE AGRICULTURAL PRODUCTION.

Chad provides an impressive example of how the supply and income situation of poor people can be improved by targeted road-building projects even in the poverty-ridden Sahel region. By building and improving two main roads connecting the Ouaddai and Wadi Firi regions to the main road network, KfW Entwicklungsbank made a major contribution to substantially increasing agricultural production, the reliability of supplies and the demand for goods and passenger transport. Peanut production, for example, tripled in the poor regions of Ouaddai and Wadi Firi. Until 2004 the two regions were reached along a track that could not be used during the rainy season. Consequently, the region was at times completely cut off from supplies and agricultural produce could not be taken to market. Repairing the track between Abéché and Oum Hadjer, a section of Chad's west-east route, made a decisive improvement to the supply situation. In the Ouaddai region the volume of peanuts produced – used in the region to make oil which is sold to other parts of the country – increased from 59,000 tonnes before the



road was improved to 150,934 tonnes. Traffic on the road has increased more than tenfold from five to eight vehicles a day before the project to 105. There has been a marked increase in passenger traffic; the road is used daily by 500 persons, almost all of whom take trade goods with them.



Whereas in the case of road traffic, only the roads themselves are in government hands, in the railways, the rolling stock is also usually operated and maintained by government bodies. In return, the executing agencies have the right or indeed the duty to derive their funding from the income generated by the prices charged for rail services. Rail traffic represents a very complex technical system whose efficiency is determined by the "weakest link in the chain". Systems of this kind make great demands on management and the underlying organisational, institutional and financial conditions. They therefore very easily fall prey to inefficiencies on the part of government institutional structures and political influence being brought to bear on business policy decisions that ultimately have negative repercussions on operation.

A particularly critical example of political influence is provided by stipulations in the case of transport tariffs. Governments understandably have an interest in ensuring low tariffs that poor people, too, can afford. However, tariffs that do not cover costs lead to financing bottlenecks unless the shortfall is covered by appropriate subsidies. Almost all railway projects struggle to balance income that is too low and rising operational costs. This leads, in part, to considerable operational and maintenance deficiencies. In the case of the Egyptian railway, the ensuing efficiency problems even led to Financial Co-operation being discontinued in the railway sector (see Box, p 30).

### **(c) Macroeconomic influence and impact.**

In a positive macroeconomic environment, the developmental effectiveness and relevance of the trunk road projects in Burkina Faso, Namibia, Malawi and Chad proved very satisfactory. They helped to promote foreign trade as well as growth and development by providing access to regional and urban production locations and markets as well as sections of international transport chains. The projects helped the countries to save transport costs and to acquire foreign currency.

On the other hand, because insufficient funds were provided for the transport sector in most other recipient countries (Lesotho, Burundi, Egypt, Bangladesh (railway), Indonesia, Tanzania and Thailand), inadequate government finances contributed to worsening the financial bottlenecks in state-operated transport sectors. Operation and maintenance problems were intensified while sustain-

ability and hence also the economic efficiency of the projects were diminished.

In some cases, political crises also reduced the success of the project. For example, a political crisis that lasted several years and caused vast numbers of people to seek refuge in other countries impaired or even fully undermined the achievement of the objective and hence the effectiveness of the two projects in Burundi that dealt with the expansion of rural infrastructures.

Overall, the four basic assumptions cited at the beginning of this chapter with regard to the impact of transport projects were in most cases confirmed by the evaluation results. The unsuccessful projects demonstrate, however, that the impacts do not occur automatically.

## **GENERAL CONCLUSIONS (RECOMMENDATIONS).**

From the perspective of the independent evaluation unit at KfW Entwicklungsbank, the numerous individual results of the reviews lead to the following conclusions, which should be taken into account in current and new projects.

### **(a) The poverty impact of potential FC projects should not determine their selection but their design.**

Experience gained in the transport projects that were evaluated does not actually indicate that certain types of projects are better suited to eradicating poverty than others. The effect of projects involving macro-level structural poverty reduction – such as projects related to trunk roads, ports or railways – on poor sections of the population is less direct than projects with specific target groups, such as rural road building. However, their impact is broader. In addition, the various types of project demonstrate mutual synergies and dependencies. Projects to connect rural regions, which help to boost the production and marketing of agricultural produce, ultimately also benefit from the development of supraregional and international transport capacities – and vice versa. Viewed from this angle, too, it is important to select projects more firmly on the basis of their potential to resolve problems and their prospects of success than on whether they have a direct or indirect impact on poverty.

### **(b) Greater impact if the project design is deliberately oriented to poverty reduction.**

Regardless of the type of project, a targeted project design

can have a positive impact on poverty reduction. Greater participation by the target group in project planning and implementation can help to avoid acceptance risk and undesired distribution effects (excluding poor people). Particularly in the case of transport projects that have only an indirect effect on poverty – for example, through lower product prices resulting from a reduction in transport costs, supply becoming more reliable or the provision of access to education – a thorough check needs to be made to determine which complementary factors are required and whether they are in place. It would be easy to overestimate the economic development potential of the region while at the same time underestimating the risks caused by the competition between local hand-made products and industrial goods and the resultant job losses. However, these risks can be mitigated by tying the transport project in with projects in downstream sectors (agricultural advice, development of credit systems, land reform).

**(c) Direct income and employment effects relate mainly to emergency assistance projects.**

Direct income and employment effects can be achieved most of all in labour-intensive road building. The possibility of deliberately employing poorer people as paid workers makes this approach particularly appropriate as a means of directly reducing poverty. However, compared with capital-intensive construction by international, qualifi-



Bangladesh – Bad roads hamper transport.

fied building companies, this means longer implementation periods and lower production efficiency. Bearing in mind that the construction quality is generally fairly poor, the costs per kilometre usually exceed those of a capital-intensive construction process. The impact analyses in Lesotho and Namibia have also shown that such direct income effects frequently remain temporary and are not a

### EGYPT – NO WILL TO REFORM THE RAIL SECTOR.

As part of an FC project, the aim was to reduce the chronic shortage of operational locomotives in the Egyptian national railway company by supplying spare parts. In order to increase the efficiency and sustainability of the measures, KfW Entwicklungsbank made a firm commitment to involving private enterprises in locomotive maintenance and repair. The railway management was initially convinced of the advantages of this manner of proceeding. At first this also led to a marked improvement in the performance figures of the locomotives. At the end of the FC support, the railway company – mainly because the transport tariffs were too low and there were other operational inefficiencies – did not have enough funds left to carry on cooperation with the private sector independently over the long term. As a result, the availability of the locomotives slumped back to the far too low initial level. Owing to the lack of willingness on the part of Egypt to tackle the actual causes of the problem by undertaking a thorough reform of the executing agency and tariffs, further promotion of the Egyptian railways by Germany was consequently stopped.

significant method of providing initial financing that will stimulate long-term ways of earning a living. The additional income is spent on basic commodities and not invested in production goods. Nor was self-help encouraged. Relying too heavily on short-term direct income effects – at the expense of longer-term indirect effects – therefore seems appropriate mainly for emergency assistance projects that are primarily concerned with offsetting a crisis-generated loss of income and assets in the short term.

**(d) Labour-intensive implementation concepts are not better "per se".**

The option of allowing transport sector projects to be carried out either by using capital-intensive procedures involving international suppliers and service providers or by taking advantage of local resources in a labour-intensive construction method that creates direct income

usually only applies to road projects that are technically undemanding (building regional tracks and roadways). First, the expected direct and indirect impacts should be compared. If the labour-intensive construction method is chosen, it should be ascertained whether an appropriately qualified local construction company can be contracted to carry out the work as a means of providing employment for the local population. If there are no appropriate companies or the project executing agencies are not in a position to arrange for a contract to be issued and for the services to be effectively monitored, the force account construction method is a possible alternative. This concept should, however, be restricted to the area concerned and plans should be made to involve additional external consulting services. The additional cost of the consulting services is usually unavoidable and can be justified economically as the project executing agencies are rarely in a

Malawi – Labour-intensive road construction.





Small businesses along a road create incomes.

position to organise and carry out this work efficiently on their own. By contrast, resorting to local building contractors tends to give a greater boost to the sustainability of the project. If, in the course of the required sector reforms, road maintenance is to be transferred systematically to the private sector, there needs to be a sufficiently large number of small and medium-sized construction firms. The projects supported by the international donor community can – and should – make an active contribution to developing efficient corporate structures of this kind. However, some projects (Burundi) show that this approach, too, involves far higher consultancy costs as monitoring and training small construction companies requires a great deal of input. Ultimately, there is no blanket answer to the question of which is the best implementation concept.

Only paved roads are passable all year round.



Rather, the issue should be resolved on a case-by-case basis depending on the developmental (impact) priorities and the underlying local sectoral conditions.

**(e) Road sector – consistent focus on maintaining and financing a priority national network.**

In the area of road traffic, a key precondition for success is to define a priority network on which the limited funds available for development and maintenance can be concentrated. In addition, a particularly promising approach has proved to be separating road maintenance management (national roads authority), implementation (private building enterprises) and financing (by extra-budgetary resources, e.g. road funds). Even if the relevant reforms that were frequently been called for by the World Bank as part of its Road Maintenance Initiative turned out to be problematic and could only be implemented hesitantly, they often made a decisive improvement to the underlying sectoral conditions. Particular attention should be given to the implementation of financing reforms, especially the levying of sufficient fuel taxes to finance the road funds and structuring fund management in such a way that is independent of public budget considerations. Fund income often fails to cover costs because the tax rate is too low or, because of political pressure, it is not used for the benefit of the road sector alone. It is in the interest of the donor community to insist on a progressive adjustment of the levies. For the purpose of ensuring appropriate and efficient use of the funds, a simultaneous effort should be made to involve user groups such as associations of commercial transporters in fund management or at least in monitoring the use of the fund resources available for maintenance.

**(f) Maintaining rural routes – preferably by the local private sector with regional control.**

Attempts have been made at the level of the rural roadway network to ensure the long-term success of the project by involving the target groups more in construction and maintenance. In some cases, executive responsibility was transferred entirely to the user communities. It was already common practice in the past for the local population to participate in the easier ongoing maintenance tasks. Since what is involved is essentially manual work, this is relatively straightforward to implement from a technical point of view. Nonetheless, it has sometimes proved diffi-



Nicaragua – Fords replace expensive bridges on rural roads.

cult to get the local people to commit themselves reliably to the work, particularly if they are not paid for it and seasonal agricultural workers are needed.

It is even more difficult to transfer the entire executive responsibility fully to the municipalities (as was attempted in Burundi and Bolivia) as they are generally unable to cope with the technical, staffing and financial demands of tasks of this kind. An attempt, with the assistance of centralised service providers, to make it easier to decentralise the executive responsibility fell foul of problems related to the allocation of powers and corruption. With hindsight, concepts which involve devolving some or all executive responsibility to the municipalities have so far not proved feasible. Rather, it is more appropriate to pursue the concept of regional project executing authorities, as used for the main road network, which – in conjunction with the user communities – limits itself to planning and monitoring the investment and maintenance measures carried out by private enterprises.

#### **(g) Rail and sea transport – fair competition and public private partnerships required.**

Long-distance rail transport is frequently in direct competition with road transport. More financial support is usually given to road transport, although when distances exceed more than around 200 kilometres, higher costs are generated for the economy than by an efficiently working rail transport system. This is because road transport is often less susceptible to disruptions to service and inefficiencies. An inefficient rail system not only causes a

marked increase in costs and tariffs; it also lowers transport quality, especially speed and reliability. Donor-supported railway projects can usually do no more than remove specific bottlenecks – such as the non-availability of locomotives – without eradicating all deficiencies (e.g. the poor state of repair of the tracks and signalling and communication equipment). Moreover, road transport frequently benefits from toll-free road use, so that even if the railway is run efficiently, transporters have economic reasons for preferring to use the roads. Because this distorts competition, it is difficult to introduce cost-covering rail transport tariffs even if operation is efficient. For many users, the decision to use rail transport also means accepting a broken transport chain. Goods have to be loaded from road to rail and back to road as in many cases the tracks do not extend as far as the local area of the senders or recipients.

Against this background, the cost advantages of rail transport for the economy can only be implemented if they have positive effects for the individual users. In addition to prices that are in line with market conditions, the service must be of an appropriate quality as deficiencies in this area (transport times, loading and unloading speeds) mean direct costs for rail customers. Given the frequent

During the rainy season many rural roads are hardly passable even with ox carts.





Track construction works to rehabilitate a railway line.

inefficiency of the state executing agencies, rail transport can only become efficient enough when the private sector is involved or when private sector principles such as cost-effectiveness and profit orientation are applied. The introduction of public private partnership (PPP) concepts would seem to be appropriate. The state usually retains ownership of the rail network and responsibility for operating it, while transferring the (fee-paying) use of the rolling stock to private operating companies.

In roughly half the countries where, in the period under review, railway projects were evaluated ex post, the donor communities tried to implement PPP concepts through political dialogue. This has frequently met with political resistance. On the one hand, governments are generally opposed to selling or allowing private sector use of government assets on terms that are profitable for the investors. On the other hand, such models tend to lead to a politically undesirable reduction in staff surpluses, which are often large. Moreover, the involvement of the private sector as a "counterpart player" requires a competent government office which is capable of handling the privatisation process and of monitoring the private sector adequately. This is often not the case. For these reasons, so far only one of the ex post evaluated projects – the railway company in Cameroon – actually resulted in a franchising arrangement being set up. However, this case provides impressive evidence of the microeconomic and

macroeconomic advantages that can be thus achieved. The operating agreement with an international company allows it to use the public rail network and parts of the rolling stock for a fee. The charge for use and the tax revenue resulting from profitable operation of the railway today enable the government to subsidise third-class passenger transport as well as to channel profits into its budget.

From an operation dependent on public subsidies, this railway system has thus been turned into a source of income for the state – at the same time supporting the poor sections of the population by offering affordable tariffs. The clear increase in the efficiency of the private sector operation, particularly with regard to reliability and time-saving, has resulted in a considerable increase in the volume of freight transport on this railway line and has brought the country – via international transport from the port of Douala to the neighbouring inland states – additional foreign currency income.

Against this background, German FC should in appropriate cases conduct a thorough review of the extent to which the private sector can be more involved. Given the weak regulatory and supervisory structures in many countries it is unlikely to be possible (yet) to privatise the companies completely. However, German commitment should at least be made dependent on the introduction or use of private sector mechanisms in state-owned enterprises. If the partner is basically unwilling to tackle re-

forms, German Development Cooperation should consequently withdraw its support from these (sub-)sectors, as it did in Egypt.

The recommendations for implementing PPP concepts in long-distance railway transport can also be applied to the water transport sector. In the two port projects evaluated, the key risks resulted from the inefficiency of the government port authorities. This led to high operating costs, poor service and insufficient maintenance and repair services. By privatising or outsourcing services, it has proved possible to reduce these risks (Acajutla, El Salvador) or even to eradicate them (Douala, Cameroon) and to bring the project to a successful conclusion.

### SUMMARY.

The conclusions to be drawn with regard to FC projects in the transport sector relate primarily to the issue of state operation. As far as possible at the time of the project appraisal, efforts to bring about the sectoral and executing

agency reforms needed to resolve efficiency and effectiveness problems should provide clear evidence of the will to reform. However, rather than mere intention, these reforms should have already been adopted and activated as policy measures. In the case of railway projects, private sector mechanisms should not be introduced for sections only but, whenever possible, for the entire operation of the rolling stock. Road sector reforms have proved to be somewhat easier to implement in recent years as they are less complex and can be implemented progressively. However, in this sector, too, before the project begins, agreement should be reached about the reforms to be carried out and initial steps (institutional/organisational separation of functions, introduction of road funds that are fed by a fuel levy) should have actually been taken. In such cases, the impact and efficiency of the assistance will be heavily dependent on the extent to which the international donor community is able to adopt a unified stance vis-à-vis the partners and to make joint offers of support or at least ones that have been closely coordinated.

Bangladesh – Buses run regularly on upgraded roads.





### 3. ANALYSIS OF THE WEAKNESSES AND REASONS FOR THE FAILURE OF FC PROJECTS.

#### WHERE WERE THE PARTICULAR WEAKNESSES OF UNSUCCESSFUL PROJECTS?

Although the 71% success rate of the projects supported by KfW Entwicklungsbank is good, it is worth considering why some projects failed to have a sufficient developmental impact. The following analysis should help to pinpoint the risks which undermine project success and which can be reduced by ensuring that the project design is appropriate.

Taking previous analyses as its basis, the independent evaluation unit at KfW Entwicklungsbank examined the weaknesses and reasons for the failure of all projects evaluated in 2004 and 2005. This added quantitative weight to previous knowledge about significant weak points in FC projects and allowed additional information about the strength of their impact to be gathered.

The three weaknesses and reasons for project failure that occurred far more frequently than others were insufficient efficiency on the part of the project executing agency or operator, unfavourable underlying sectoral conditions and deficiencies in the immediate environment of the target group (see Chart 1).

#### DEFICIENCIES ON THE PART OF THE PROJECT EXECUTING AGENCY OR OPERATOR ARE BY FAR THE MOST COMMON WEAKNESS.

In almost all of the unsuccessful projects, insufficient efficiency on the part of the local executing agency or operator played an important role and in more than half of all

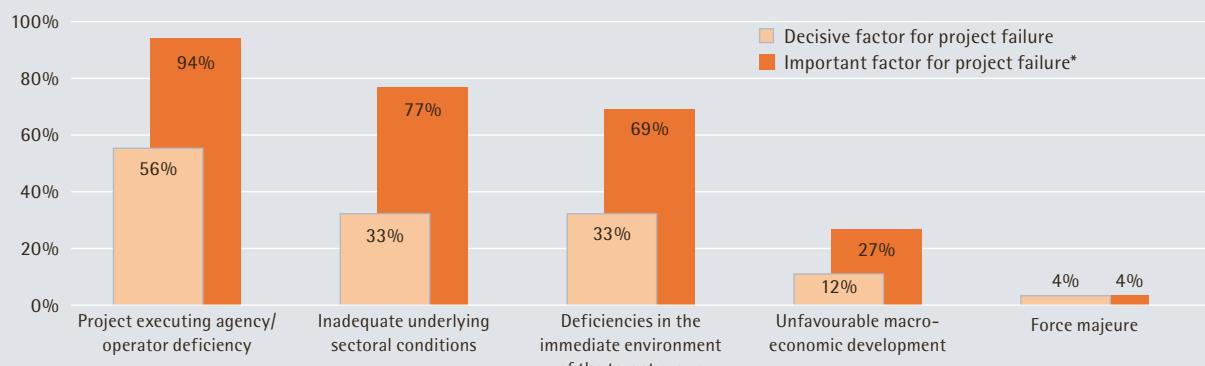
cases this was even one of the main factors for the inadequate outcome of the project, calling for a more thorough analysis of this set of causes. The deficiencies occur somewhat more frequently in the administrative area at the project executing agency and operator than in the technical area. However, weaknesses in the technical area generally have a more marked impact on the project's final rating. In both areas underqualified staff is the most frequently observed phenomenon (see Chart 2, p 39 and Chart 3, p 40).

In the administrative area, management errors (e.g. inappropriate strategic decisions) and a lack of efficiency caused by too many staff or insufficient collection of tariffs are particularly evident. In the technical area, deficiencies are particularly apparent in technical efficiency (plant availability, loss rate) and service quality (quality of the goods or services provided, delivery times).

It is striking that shortcomings in the organisational structure of administrative bodies and technical procedures occur less frequently than deficiencies regarding the qualification of the project executing agencies. Nonetheless, they have a decisive negative impact on the projects far more frequently. The organisational and operational technical and administrative structures of the project partners therefore require particular attention when new projects are appraised.

The deficiencies of project executing agencies and operators have a very differentiated impact on the three success criteria. In 85% of all unsuccessful projects defi-

CHART 1: RELATIVE FREQUENCY OF FACTORS WHICH WERE IMPORTANT OR EVEN DECISIVE FOR PROJECT FAILURE.



\* The category "important factor" also includes those cases in which the factor had a decisive impact on the outcome of the project.

## METHODOLOGICAL ASPECTS.

Given the relatively small number of cases and the frequently insufficient pool of data, an expert survey was carried out rather than an analysis of deficiencies and reasons for failure. From a list of around 25 potential causes of project failure, each evaluator identified the factors which, in the projects in question, were important or even decisive for the overall performance rating. Particular attention was devoted to the following methodological problems.

**(1) The problem of redundancy:** For an analysis of this kind, the influencing factors must be defined in such a way as to ensure that they do not overlap. This enables weaknesses to be identified clearly and the force of the influencing factor is not distorted by what turns out to be arbitrary classification. If, for example, there is no legislation providing for money to be effectively collected from customers in arrears, the project executing agency can hardly be held accountable for insufficient collection provided that it has a well-organised procedure for collecting fees. This analysis set out in these cases to establish the cause and not to evaluate the effects (in this example: inadequate underlying sectoral conditions rather than a deficiency on the part of the project executing agency).

Another particular methodological problem is the potential cause of failure referred to as "inappropriate project concept". Test runs had shown that almost every failure – from whichever angle it is viewed – can be seen as related to deficiencies in the project concept. For example, the weaknesses can be seen as insufficient efficiency on the part of the operator or the project executing agency or as failure in the project concept to take sufficient account of this shortcoming. To avoid coming to the pointless conclusion that there are project concept weaknesses in all failed projects, the factor "inappropriate project concept" had to be removed from the direct analysis. In this analysis, therefore, project concept defects were not recorded as a separate item but only indirectly as part of the resultant problem in question.

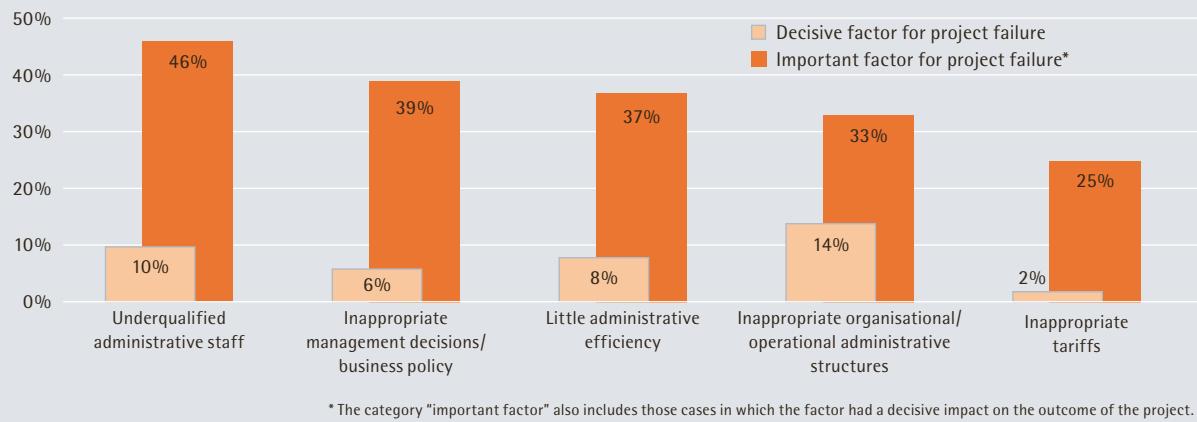
Weaknesses which proved to be strongly interconnected were also amalgamated in main evaluation categories in order to allow meaningful evaluations.

The **main categories** in the analysis were:

- Problems in the immediate environment of the target group (little self-help potential, adherence to established patterns of behaviour)
- Project executing agency weaknesses (inadequate staffing or organisation, inappropriate business-policy decisions such as failure to adjust to changed market conditions or politically motivated management decisions that are harmful to business)
- Inadequate underlying sectoral conditions (expenditure priorities, state intervention, legal framework)
- Unfavourable macroeconomic developments (economic crises, changes in world market prices)
- Force majeure (natural disasters, civil wars)

**(2) The problem of multiple causes:** In most cases, several influencing factors operating in parallel are responsible for the failure of a project; their impact on the success of a project can also vary considerably. To do justice to the issue of multiple causes, multiple designations were allowed for the influencing factors and therefore the evaluation recorded only the relative frequency with which certain influencing factors occur as a weakness or the cause of failure. This rules out simplistic statements such as "x% of the cases of failure are due to factor y". When the causes were captured, factors that had a decisive influence on the overall outcome were filtered out of those factors that were acknowledged as being important in individual cases. Distinguishing between the factors in this way allows those that occur frequently but only make a limited contribution to the overall outcome to be separated out from other factors that occur less frequently but have a very strong impact on the overall outcome.

**CHART 2: RELATIVE FREQUENCY WITH WHICH ADMINISTRATIVE FACTORS  
ON THE PART OF THE PROJECT EXECUTING AGENCY/OPERATOR  
WERE IMPORTANT OR DECISIVE FOR PROJECT FAILURE.**



iciencies on the part of the executing agencies impeded the achievement of the project objectives (effectiveness) and had a negative impact on the expected sustainability of future services. In roughly three-quarters of the projects this also reduced the efficiency of the achievement of the objectives. By contrast, this factor had an adverse effect on the achievement of the overall objective (significance/relevance) in only 30% of the projects.

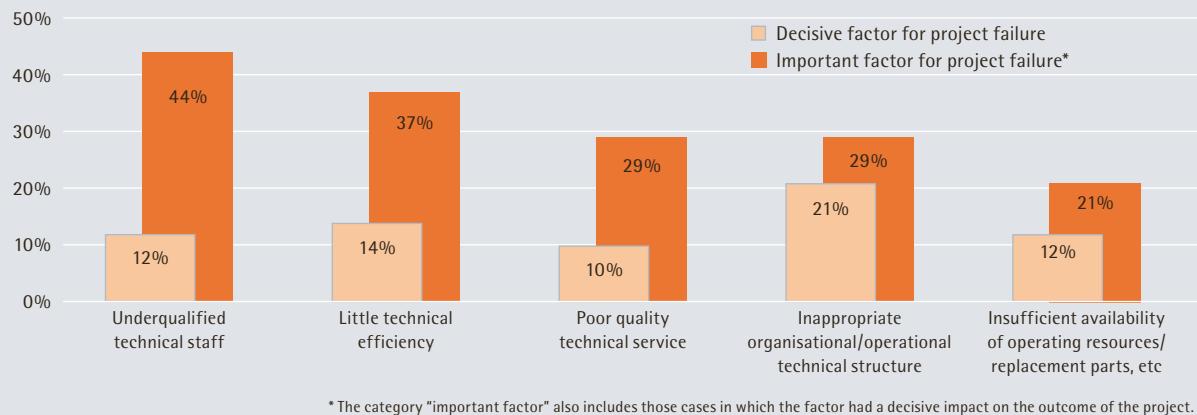
Given the typically weak executing agency structures in many German DC partner countries, the efficiency

of the project executing agencies will also remain a key risk factor in the future. In-depth analyses of project executing agencies before the start of a project and measures to strengthen and enhance the skills of project executing agencies in the context of TC, for example, are potential ways of better estimating and limiting the risks. However, we need to be realistic about the possibilities of exerting external influence via promotional measures that are extremely limited in terms of time and content. To achieve sustainable effectiveness, what is usually needed is not

## WATER SUPPLY IN INDONESIA, AN EXAMPLE OF DEFICIENCIES IN COMMERCIAL AND TECHNICAL EFFICIENCY.

Management negligence in imposing drinking water charges and inconsistency in collecting overdue payments led to such high losses of revenue at an Indonesian water supply company that sufficient funds were no longer available to cover essential operational expenditure (e.g. chlorine for water disinfection). The water supply company was able to collect only 63% of its receivables within a year. Bad debts written off amounted to more than one year's sales. The company has recorded negative equity for two years and is thus heavily indebted. This and the technical staff's lack of experience in applying the correct chlorine dosage led to disturbing bacteriological impurities in 40% of all water samples. At the same time, the increase in water losses in the distribution network caused by neglected maintenance had a negative impact on water quality because dirt in the dilapidated network meant that treated water was recontaminated. The health effects to be achieved through the project were therefore less extensive than expected. The project was therefore assessed as having an insufficient impact.

**CHART 3: RELATIVE FREQUENCY WITH WHICH TECHNICAL FACTORS  
ON THE PART OF THE PROJECT EXECUTING AGENCY/OPERATOR  
WERE IMPORTANT OR DECISIVE FOR PROJECT FAILURE.**



for the symptoms to be treated but for the causes to be removed.

### UNDERLYING SECTORAL CONDITIONS ARE CRUCIAL TO PROJECT SUCCESS.

After deficiencies on the part of the project executing agencies, unfavourable underlying sectoral conditions (e.g. state interventionism, inadequate legislation or inappropriate sectoral expenditure priorities) are the second most common weakness. They are often closely related to the efficiency of the project executing agency because they determine its room for manoeuvre. Politically regulated tariffs which do not even allow the executing agency to cover essential operating costs sooner or later also lead to inefficiency on the part of the executing agency. In this analysis, however, they are classified as being caused by the underlying sectoral conditions and not by the inefficiency of the project executing agencies. In just over three-quarters of all unsuccessful projects, the underlying sectoral conditions contributed to a negative overall assessment; in one-third of all cases they were even one of the main factors.

It is interesting to note that unfavourable underlying sectoral conditions more frequently have an adverse effect on project success in areas immediately related to the economy (economic infrastructure, manufacturing and financial sector) than in areas related to the social infrastructure. The financial sector is particularly sensitive to

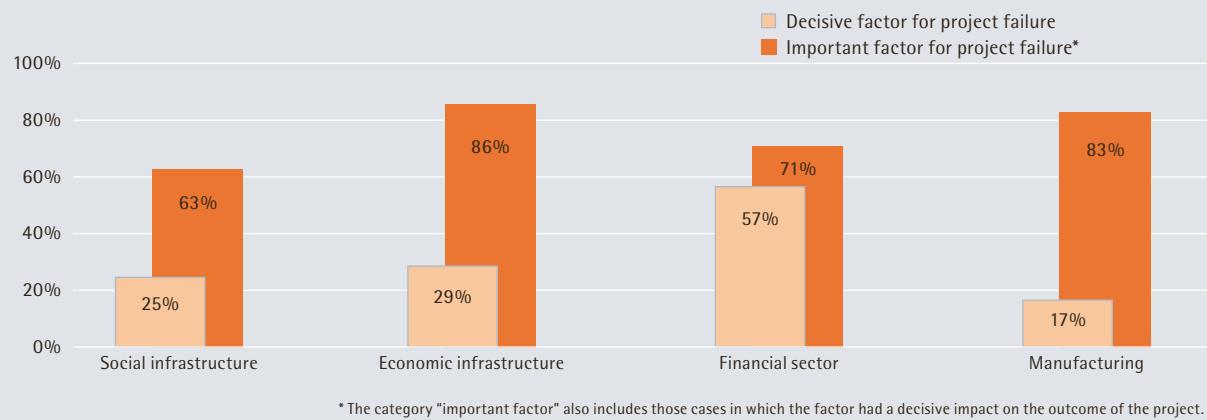
unfavourable underlying sectoral conditions. This factor was actually decisive in more than half the failed financial sector projects.

In the context of a single FC project it is rarely possible to make an essential impact on the underlying sectoral conditions. However, consistently setting priorities in German DC in recent years, the trend towards programme-based joint financing and greater coordination among international donors have led to growing possibilities of holding a constructive dialogue with partner governments about changing the underlying sectoral conditions in such a way as to enhance development. If agreement is not reached on fundamental issues in sectoral policy (policy standards, sectoral structure), careful consideration should be given to whether FC commitment can produce the desired effects or whether it is pre-programmed for failure. If partner governments are willing and able to implement reforms and donor coordination is operating effectively, FC projects can constructively accompany and support the reforms. Keeping realistic exit options open in case insufficient steps towards reform are taken helps to limit proprietary risk.

### MORE ATTENTION SHOULD BE PAID TO TARGET GROUP ASPECTS.

Another factor that is almost just as important as underlying sectoral conditions for the failure of FC projects covers problems in the immediate environment of the tar-

**CHART 4: RELATIVE FREQUENCY WITH WHICH UNFAVOURABLE  
UNDERLYING SECTOR CONDITIONS WERE IMPORTANT OR DECISIVE  
FOR PROJECT FAILURE (BY AGGREGATED SECTORS).**



get group. This could also be related to deficiencies in the project concept – for example, if what is provided by the project does not satisfy the wishes and needs of the target group, or does so only in part, and is therefore of no practical use to the people concerned. However, failure to fully appreciate the finer points of project measures (e.g. not taking the medicines prescribed in health projects regularly) or clinging to established practices (e.g. slashing and burning in resource conservation projects) as well as no self-help potential can jeopardise project success or undermine it completely.

In some cases, the efficacy of projects was also reduced because the target group developed no more than

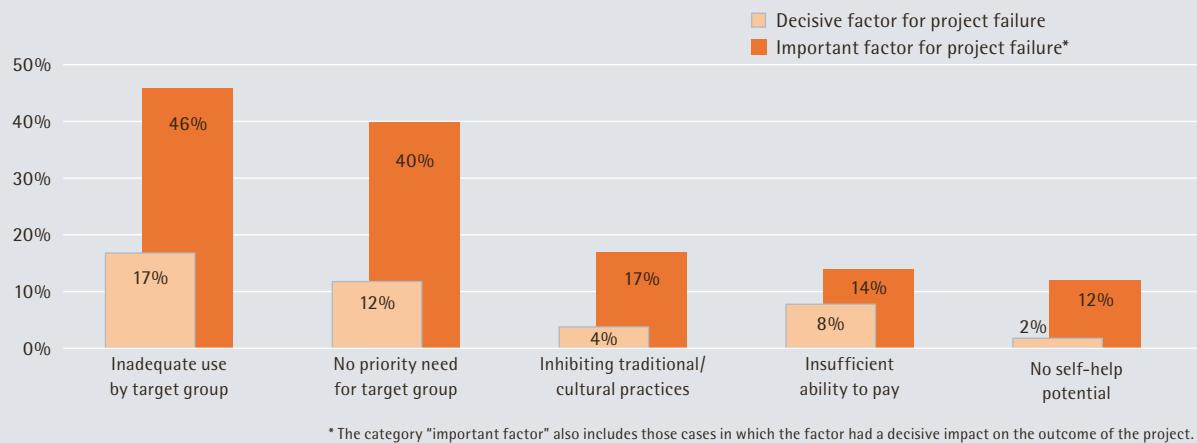
a low level of demand for what the project provided or saw only limited need for it.

One of the main ways of avoiding problems in the environment of the target group is to carry out a detailed analysis of the target group before the project begins. Wherever it is necessary and possible, the target group should be involved in the planning, implementation and execution of the measures. KfW Entwicklungsbank should therefore encourage the partner governments more than to date to perceive the solution to a key problem not merely as a technical challenge but usually also as a social process, which needs to be just as carefully planned and implemented as the technical solution.

### IRRIGATION FARMING IN JORDAN, AN EXAMPLE OF DEFICIENCIES IN THE UNDERLYING SECTORAL CONDITIONS.

In order to conserve water in Jordan, where it is in short supply, KfW Entwicklungsbank supported a project which had a reform of irrigation farming as its objective. Water wastage in agriculture was to be held in check by higher water tariffs and crops which require large amounts of water were to be replaced by plants which require less water. Because political consideration was given to the interests of the irrigation farmers, however, Jordan did not implement these reforms with the desired consistency, with the result that effective changes were not achieved in any of these areas. The project therefore had to be classified as inadequately effective overall.

**CHART 5: RELATIVE FREQUENCY WITH WHICH FACTORS IN THE AREA OF THE TARGET GROUPS WERE IMPORTANT OR DECISIVE FOR PROJECT FAILURE.**



### NEGATIVE UNDERLYING MACROECONOMIC CONDITIONS AND FORCE MAJEURE ARE RELATIVELY SELDOM DECISIVE FACTORS.

Negative underlying macroeconomic conditions such as a deterioration in exchange rates, inflation, inadequate economic growth or falling global market prices for the main export products can undermine the effectiveness of a project in a number of different ways. For example, they can lead to insufficient maintenance expenditure, reduce sustainability as a result of falling tax revenues or decrease the target group's ability to pay because of unemployment

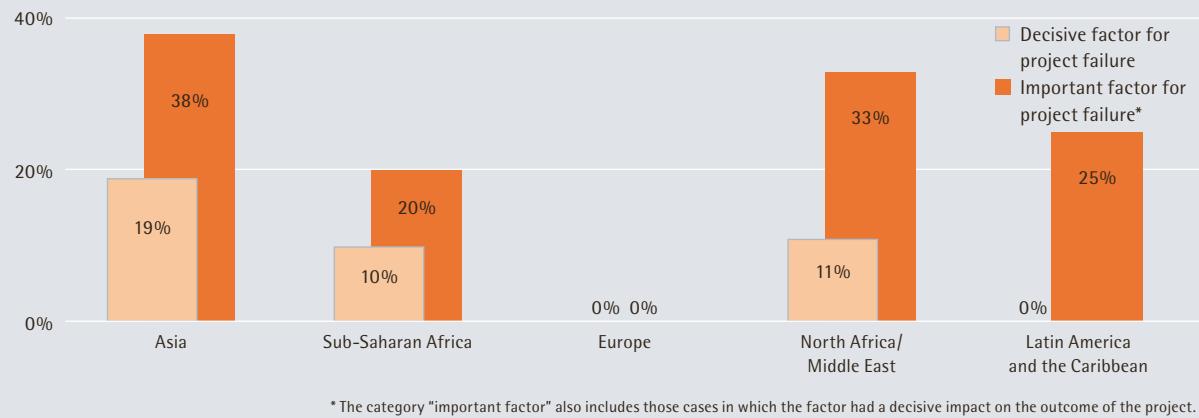
or losses of income. However, it is relatively rare for the underlying macroeconomic conditions to occur directly as a decisive weakness. This result – which is perhaps somewhat surprising – can be explained at least in part by the fact that, in particular, projects which are comparatively resistant to macroeconomic influences (e.g. basic supply projects) are promoted in countries where the macroeconomic conditions are known to be problematic.

There is a noticeable negative effect on the statistics only in cases in which the underlying conditions worsened unexpectedly during the project period, a matter which

### RURAL WATER SUPPLY IN MAURITANIA, AN EXAMPLE OF DEFICIENCIES IN THE AREA OF THE TARGET GROUP.

In Mauritania KfW Entwicklungsbank's objective was to improve the rural supply of drinking water by increasing the number of wells. However, in order to ensure that the water is safe to drink, not only does the groundwater need to be clean but the quality of the water also needs to be safeguarded until it reaches the consumer. It is thus necessary to keep the area surrounding the well suitably clean (e.g. cover the well and make it inaccessible to animals so that it is not polluted by faeces) and to avoid pollution during transport and storage. Despite sensitisation campaigns and hygiene education, it was not possible in this case to establish suitable practices in the target group. Most of all, intensive use of the wells by herds of passing nomads, which is firmly established as a traditional right, led to such bad pollution that the intended health effects could not take hold. The project had to be classified as unsuccessful.

**CHART 6: RELATIVE FREQUENCY WITH WHICH FACTORS RELATED TO UNDERLYING MACROECONOMIC CONDITIONS WERE DECISIVE FOR PROJECT FAILURE IN THE VARIOUS REGIONS (BY REGION).**



could therefore not be taken into account when the projects were being selected. This might also explain why negative underlying macroeconomic conditions in Asia have clearly led more frequently to problems than in other regions as many of the most recently evaluated projects were hampered by the Asian crisis in the late 1990s (which took most people by surprise). The sectoral composition of the Asian portfolio (numerous projects to promote the private sector and develop the economic infrastructure) involves greater dependence on the macroeconomic environment than a sector portfolio in which most projects deal with supplying basic needs.

Force majeure had a decisive impact on project success in only a very few cases. Only two projects in Burundi were so severely impeded by the civil war that they could not achieve the expected results. There were no cases of natural disasters being responsible for failure. On the contrary, a rapid, flexible response meant that projects in areas affected by natural disasters (e.g. earthquake relief in Bolivia) were able to help to mitigate the effects of the disaster by restoring central infrastructures.

### WHOLESALE MARKET IN BULGARIA, ANOTHER EXAMPLE OF DEFICIENCIES IN THE AREA OF THE TARGET GROUP.

In an FC/TC cooperative project in Bulgaria, local agricultural production was to be increased by enhancing the marketing of fruit and vegetables through setting up producer cooperatives and establishing a new wholesale market. Owing to the producers' negative experience with socialist forms of economy, however, no producer cooperatives were set up. Consequently, the infrastructure created for the wholesale market was used for buying and selling goods only to a very limited extent. Instead, the area was used for storage and refrigeration. The developmental impact of the project was therefore insufficient.



## 4. PROJECT EXAMPLES.

### AZERBAIJAN

PROMOTION OF THE PRIVATE SECTOR.

### BANGLADESH

COMPREHENSIVE PRIMARY EDUCATION PROJECT.

### SIERRA LEONE

RESTORATION OF RURAL INFRASTRUCTURE.

### GUATEMALA

TEACHER TRAINING CENTRES RUN BY THE SALESIANS.

### CHINA

WIND ENERGY.

### MOROCCO

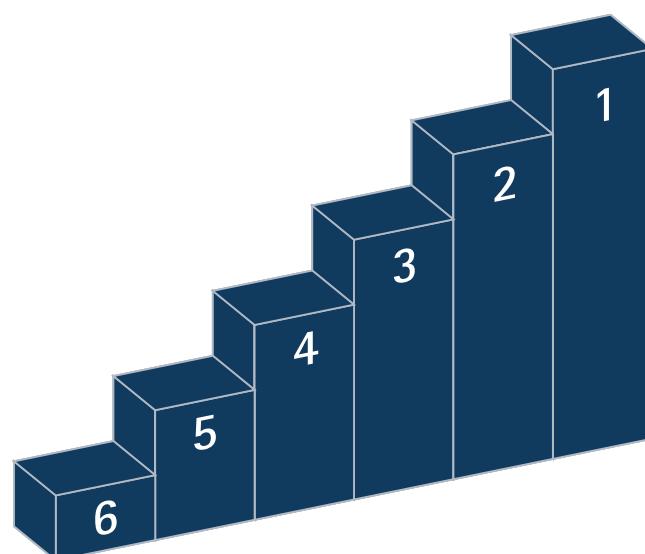
IRRIGATED AGRICULTURE.

### ALBANIA

WATER SUPPLY IN KAVAJA, KUKES AND HAS.

### GUINEA

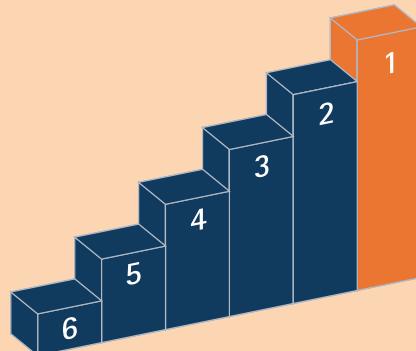
ENERGY SECTOR PROGRAMME.



# AZERBAIJAN: PROMOTION OF THE PRIVATE SECTOR.

## AZERBAIJAN

Population	8.3 million
Area	86,600 km <sup>2</sup>
Annual population growth	0.8%
Per capita income	USD 950
HDI rank (177 countries)	101
Literacy rate	99%
Life expectancy	65 years



After the collapse of the USSR in the early 1990s the economy of Azerbaijan plunged into deep crisis. The established supply and sales channels to and from the former Soviet Union were cut off abruptly and this lead to a sharp drop in production, a drastic 70% decline in gross domestic product by 1995, a deterioration in the public infrastructure, high inflation rates and a dramatic depreciation of the local currency. The crisis was aggravated by the persistent conflict with Armenia over the Nagorny Karabakh region.

Azerbaijan was – and still is – faced with the great challenge of building up a diversified and sound independent economic structure in order to reduce the high level of unemployment, which independent estimates put at

around 30% to 40% of the working-age population. In its efforts to create employment and income, the Azerbaijani government is focusing on the promotion of small and medium-sized enterprises. When the FC project was appraised in 1999, a major obstacle to the development of economic activities by small and medium-sized enterprises was (besides the weak legal system and widespread corruption) the underdeveloped financial sector, which hardly provided any funds to finance investments in the SME sector.

The FC project comprised both advisory services for suitable partner banks to support them in building up their corporate lending business (accompanying measure) and, in parallel, the establishment of a bilateral APEX fund (the German-Azerbaijani Fund, GAF). This fund extends revolving credit lines to the banks, which use them to refinance investment loans to local small and medium-sized enterprises.

The fund, which is handled by a fund manager, was endowed with FC funds amounting to EUR 8.4 million. An extra EUR 1.8 million was also provided for advisory services and fund management.

The target group comprised enterprises with up to 100 employees. The main objective of the project was the sustainable expansion of lending to small and medium-sized enterprises. By reducing the existing deficits in the financial services offered by the Azerbaijani banking sector, a contribution was to be made to supporting the private sector in Azerbaijan and to deepening and broadening the financial system (overall objective).



From the start of the project in 2001 until mid-2005 the four partner banks of the GAF granted the target group altogether around 4,400 loans for an average amount of approximately EUR 5,670 (total volume: EUR 25 million). This underlines the relatively broad impact of the project.

The portfolio quality of the FC-financed loans is very good; the portfolio at risk constitutes only 1.2% of the outstanding loan portfolio. All four partner banks have expanded their capacities in the area of SME lending considerably and introduced further products specifically for this customer group. A particularly positive aspect is that all banks use the FC funds on a revolving basis and have also started to further expand this business by mobilising their own funds.

The impact analysis of the loan programme conducted in the context of the ex post evaluation shows that the loans and the related investments enabled 54% of small and medium-sized enterprises and 26% of micro enterprises to take on more full-time employees.

The change in mentality which took place at the partner banks during the programme implementation phase and their willingness to increasingly open up to lower customer segments have led to a distinct improvement in the financial services offered to small and medium-sized enterprises.

In addition to the positive results achieved in terms of income and employment, the following positive impacts on the target group were identified in the above-mentioned impact analysis:

- Improved access to loans increases the reliability of enterprises' planning and thus their willingness to invest.
- The partner banks' financing advice that is specifically geared to the target group usually enables the enterprises to better analyse and assess their financial situation.
- The newly created financing opportunities help to bridge temporary liquidity gaps, making enterprises more crisis resistant.



The very positive impacts achieved at the partner banks also had knock-on effects on the entire financial and banking sector:

- The project successfully introduced credit technology adapted to SME lending and generally increased transparency in the banking sector. The new credit technology is regarded in the financial sector as a key success factor and is increasingly applied by non-partner banks, too (higher financial sector efficiency).
- By participating in the FC project, the partner banks generally improved their reputation and, in particular, the confidence of borrowers and savers in the banks increased substantially. This, in turn, had a positive impact on the acquisition of savings and term deposits by all partner banks and led to an expansion of the lending business. In addition, the programme enabled participating banks to build up or deepen business relations with international financial institutions.
- Providing long-term funds for refinancing long-term loans meant that maturity matching at the partner banks also improved (greater stability of the financial system).

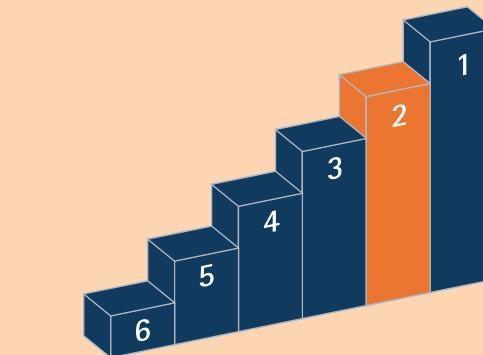
As a result of better access to formal lending and other financial services being provided for a large number of small and medium-sized enterprises and the extensive systemic impacts achieved, the project made a significant contribution to economic development and supported the transformation process.

Overall, we judge the developmental efficacy of the project as **good (rating 1)**.

# BANGLADESH: COMPREHENSIVE PRIMARY EDUCATION PROJECT.

## BANGLADESH

Population	141.8 million
Area	144,000 km <sup>2</sup>
Annual population growth	1.9%
Per capita income	USD 470
HDI rank (177 countries)	139
Literacy rate	41%
Life expectancy	62 years



With more than 1,000 inhabitants per km<sup>2</sup> Bangladesh is by far the most densely populated state in the world. About 75% of the roughly 142 million inhabitants live in rural villages. The poverty rate of 36% (based on the national poverty line of USD 1 per day) is very high, not only in the regional context. Although corruption is widespread, the government basically pursues a poverty-oriented policy.

The low educational level of the population is one of the key obstacles to development in Bangladesh. When the project appraisal was conducted in 1995, the literacy rate for people over 15 years of age was only 35% and the rate for women only 22%. At the time, approximately 70% of school-age children attended primary school (classes one to five). Very high repeat rates meant that the classes were overcrowded and learning conditions bad. As drop-out rates were also high, the internal efficiency of the system was low. Low efficiency is also the result of very high non-attendance rates caused by the fact that many children help in the home or work in the family fields.

The FC project was part of a country-wide sector programme to promote primary education and focused on improving the school infrastructure in three districts in Rajshahi Province (approximately 7 million inhabitants) in the northwest of the country through measures such as constructing, repairing and equipping classrooms and teacher training centres, and procuring equipment for local school supervisory authorities.

The programme was carried out in cooperation with GTZ. The TC measures mainly entailed the preparation of

teacher training concepts and manuals, conducting training measures for teacher trainers, multipliers and teachers, developing teaching and learning materials and measures to promote the participation of school management committees and local authorities.

The total cost of the infrastructure component (Phases I and II) adds up to just under EUR 25 million, almost all of which came from FC funds. At the end of the project, the quantitative targets had been clearly exceeded. Altogether, 1,195 schools with 3,606 classrooms were rehabilitated or newly built (+ 39% above the target figure). The classrooms, where lessons can now be held regardless of the weather, are used intensively. The teachers are comparatively well motivated and they use the teaching materials developed and provided as part of the project (globes, abacuses, compasses, maps, etc). Overall,





there has been a marked improvement in teaching quality. However, not all problems have been solved. Teachers are complaining about the strain of teaching in two shifts, common practice at 80% of schools (i.e. classes one and two in the morning, classes three to five in the afternoon). Moreover, sufficiently qualified teachers are still in short supply. The funds provided by the government for school repairs and maintenance are not adequate. By having teachers, parents and municipal representatives participate in the school management, an important prerequisite has been fulfilled for sustainable school operation. Besides monitoring school maintenance measures, parents check the attendance of teachers and support cultural activities, which also receive assistance from the municipal authorities.

The project objective was to achieve adequate utilisation of the classrooms financed and to improve the learning achievements in the project region. The number of pupils per classroom improved in the programme schools from 91 to 59, although the non-attendance rate is still approximately 20%. Tests have shown that in comparison with other districts in Rajshahi Province the attainment of schoolchildren in the three project districts has clearly improved. Drop-out rates fell by between 10% and 25%. The project objective was thus fully achieved. The assessment of the achievement of the overall objectives was based on the development of gross enrolment rates. In the three districts, this rate was around 100% (target: at least 90%). At the time of appraisal, a separate indicator for girls was omitted. It is pleasing to note that there has been an above-average increase in their enrolment, which matches that of boys.

Taking the two phases together, the project led to an improvement in the schooling situation for approximately 100,000 primary school children as a result of the rehabilitation work, and new buildings provided around 80,000 badly needed school places. That is nearly twice as much as originally expected. Even if the pupils' school performance generally still leaves room for improvement, there was an above-average increase in performance in the project districts, also thanks to the very successful, complementary support of TC.

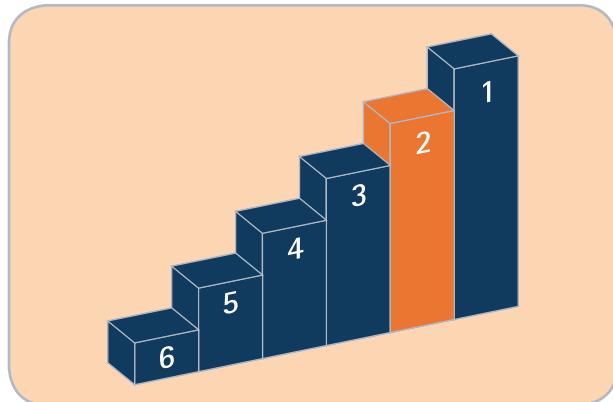
Individual project components had structural effects for the entire sector. That applies, for example, to the courses and materials to promote the management committees in the schools, which are now to be introduced throughout the country, or for the further training centres for teacher, an additional 300 such facilities having already been built on the basis of the current model.

The primary developmental benefits of the project are that better basic education equips children to assume responsibility for their own lives, to solve problems and to overcome poverty. Greater self-confidence, better employment opportunities in the formal and informal labour market and greater awareness, e.g. of nutritional matters and family planning, are some illustrations of this achievement.

We therefore assess the project's developmental efficacy as generally **satisfactory** without any noteworthy restrictions (**rating 2**).

# SIERRA LEONE: RECONSTRUCTION OF RURAL INFRASTRUCTURE (POST-CONFLICT PROJECT).

SIERRA LEONE	
Population	5.4 million
Area	71,740 km <sup>2</sup>
Annual population growth	2.0%
Per capita income	USD 200
HDI rank (177 countries)	176
Literacy rate	30%
Life expectancy	37 years



It is mostly bad news that has put the West African country of Sierra Leone into the headlines in recent years. Mass poverty, economic decline, corruption and, in particular, years of guerrilla warfare with rebels from neighbouring Liberia (1991-2002) were the usual stories. As a result of this turbulent recent history, Sierra Leone is considered one of the world's poorest and least developed countries. It is characterised by poor hygiene conditions, inadequate educational opportunities, insufficient health care, low monetary income and discrimination against women and girls.

While donors were generally prepared to provide financial and technical support for reconstruction after the peace treaty of 2002, the biggest problem at first was to make the state structures, which had been extensively eroded during the war, operational again. At the same time the government of Sierra Leone had to implement a programme for disarming, demobilising and reintegrating former combatants in cooperation with the donor community. This was a major prerequisite for gradually reintegrating the ex-combatants who had grown used to fighting over many years and, hence, for establishing peace in the interior.

Under these circumstances immediate action was needed. The German side responded with abbreviated decision-making procedures and a flexible programme approach. Planning and implementation were carried out under a cooperation agreement between German Technical Cooperation and Financial Cooperation. This unconventional approach has proved to be correct in hindsight too. The programme components comprised:

- Construction and rehabilitation of training centres
- Training (in construction-related crafts, as bakers, in farming, etc)
- Psycho-social support
- Reconstruction and rehabilitation of village infrastructure destroyed in the war (buildings, streets, farmland, ferry)
- GTZ consulting services
- Additional component for well rehabilitation

Through individual and group counselling, role-playing, detraumatisation, conflict and stress management and so on, the psycho-social component taught the participants reconciliation techniques, peace education and skills relating to gender issues. The measures included civics courses and an introduction on how to choose a profession.

The programme target group included ex-combatants and the local civilian population affected by the war, returning refugees and displaced persons, single mothers, children and elderly people. Teaching and educating ex-combatants together with the civilian population reflected the reality of the problems and promoted the reconciliation process.

The total cost was EUR 6.26 million, financed exclusively from FC funds (EUR 3.25 million) and TC funds (EUR 3.01 million).

The training activities reached around 2,350 persons, consisting of 775 male ex-combatants and 100 female ex-combatants, another 735 men and 520 women from various



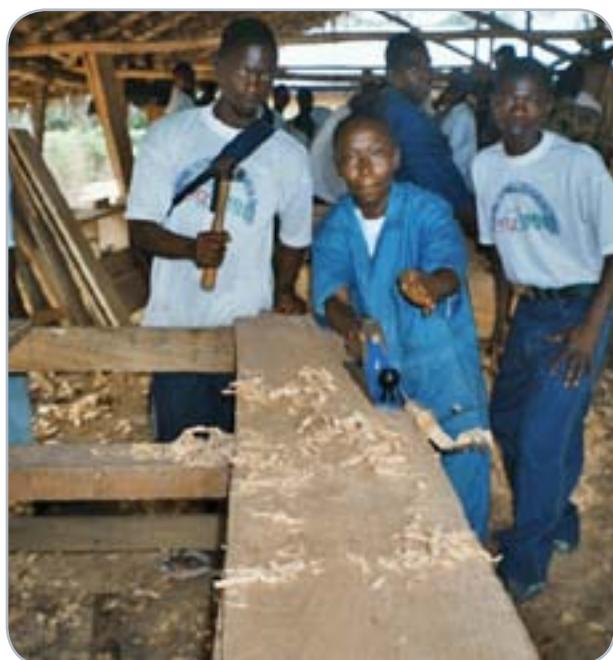
communities, and 220 adolescents and children. Training took place in 13 temporary centres which offered help in choosing a profession, an introduction to the vocational training on offer with a theoretical and practical training component, as well as psychological counselling and civics. Several buildings, 156 kilometres of roads and 50 hectares of farmland were rehabilitated and classrooms created for 3,300 children as an integral part of the practical training.

The target group was interviewed about the reconciliation process and the integration of the ex-combatants in order to measure the achievement of the programme objectives. In three-quarters of the communities the situation was being regarded as largely free from violence. From the impression gained on site, we can affirm that the programme has made a significant contribution towards the development of social relations, the strengthening of the local institutions' capacities and the utilisation of local infrastructure. At least 50% of those who had been trained were still exercising the profession they had learned under the programme. In addition, more than 80% of the participants interviewed received immediate income benefits from the programme.

In some areas concessions had to be made regarding efficacy. Although the FC programme was the second largest of its kind after the national programme for disarmament, demobilisation and reintegration, the programme measures reached only a small fraction of the ex-combatants owing to the limited funds. Women in particular could not participate in the measures to a sufficient extent. The main reason for this was that the national programme often did not classify these women as ex-combatants as they did not own any weapons or were simply classified as wives of combatants. As a result, women were underrepresented among the programme participants. The German DC programme responded to this flaw by introducing special training courses for women and by establishing nurseries. The share of women participants then increased substantially during the course of the programme.

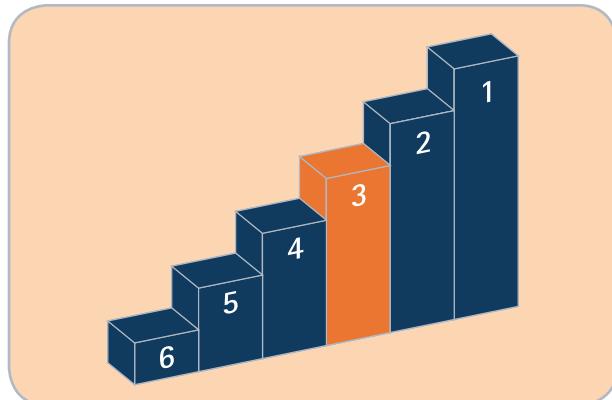
The programme objective of contributing to the reconciliation process and to the reintegration of ex-combatants was achieved. The second programme objective, the utilisation of the reconstructed local infrastructure, was also achieved. From today's point of view, the programme concept was appropriate and suited to contribute to the peace process in Sierra Leone and to the economic reconstruction in the rural regions. What is more, the programme had an important signalling effect on the consolidation of the peace process in Sierra Leone, due mainly to the fast response time of German development cooperation.

Overall, the developmental efficacy of the cooperative programme was **satisfactory (rating 2)**.



# GUATEMALA: TEACHER TRAINING CENTRES RUN BY THE SALESIANS.

GUATEMALA	
Population	12.6 million
Area	108,900 km <sup>2</sup>
Annual population growth	2.6%
Per capita income	USD 2,130
HDI rank (177 countries)	117
Literacy rate	69%
Life expectancy	66 years



Guatemala's indigenous population was suppressed and marginalised by the white upper class for centuries. This situation triggered a civil war that lasted over 30 years and claimed over 150,000 lives before it finally ended with a peace treaty in late 1996. About three-quarters of the indigenous population are classified as poor and over half of them are even considered very poor.

The project area, the Departamento Alta Verapaz, has a good half million inhabitants and is one of the country's poorest regions. There are hardly any basic social services such as health care, drinking water supply or primary schools. The population is 80% Mayan from the tribe of the K'ekchi', who live largely in seclusion and earn their living from subsistence farming. The majority of the K'ekchi' in the region are monolingual, meaning that they possess, at best, a rudimentary knowledge of Spanish, the official language.

In 1996, when the project was appraised, the illiteracy rate in Alta Verapaz was over 70%. Only just over half the school-age children actually attended a school, and only one in every ten children successfully completed primary education. Hundreds of villages had no primary schools within a reasonable distance. The main obstacles to improving primary education in Alta Verapaz were the inadequate network of rural primary schools, the lack of qualified teachers capable of teaching in the local Mayan language (K'ekchi'), and the shortage of adult literacy programmes.

The expansion of the primary school network was supported under another FC project ("PRONADE"). The

project presented here focused on the training of teachers. Up until the mid-1990s there was just one state-run teacher-training institution in the whole Departamento; it was far from capable of meeting the need for teachers and did not particularly promote teaching in the indigenous language either. The Catholic religious order of the Salesians, on the other hand, which had been operating in the region for a long time, has been actively committed to the bilingual training of primary school teachers since the early 1980s.

The FC project supported the expansion (and equipping) of two existing teacher training centres run by the Salesians, the construction of a third, new training centre specifically for female teachers and the construction of seven schools to be run under a pilot scheme. The total cost was EUR 5.5 million, of which EUR 4.1 million was financed by a German Financial Cooperation grant and the remainder from funds provided by the Salesians.

The project objective was above all to improve primary school teacher training in the Departamento Alta Verapaz. In particular, at least 440 bilingual primary school teachers were to be trained; at least 70% of them were to use bilingual teaching materials. The training centres were designed to reach at least 36,000 schoolchildren and 5,000 adults (literacy courses) every year.

These target figures were clearly exceeded. Around 1,750 primary school teachers have now completed their training by the Salesians, representing 80% of all primary school teachers in the Departmento. The Salesians have since educated over 66,000 schoolchildren and well over



5,000 adults using bilingual methods. School enrolment rates in the project region have increased much more strongly than expected but are still below the national average.

The main reason why these targets were so well achieved was that the Salesians developed a correspondence course for assistant teachers which allowed the educational goal to be achieved far faster and more efficiently – with slight concessions to quality – than by the classical residential college system. The consequence, however, is that some of the residential college rooms created by the project will no longer be needed for training teachers in the future. Besides, other public and private teacher training centres have since been established in Alta Verapaz and official school policy has been giving increasing importance to teaching in the indigenous language.

In the light of these observations, the FC project could have been considerably smaller. The capacities of the residential college, however, are not lying idle at present but are being used by the Salesians for improving training in skilled trades for young men from the K'ekchi' communities.



The Salesians' consistent focus on marginalised rural regions and their appreciation of indigenous language and culture made a decisive contribution to the success of the project. With a solid primary education the children now have greater opportunities to take responsibility for their own lives and to defend the interests of society. The project also had a positive influence on the teachers. Not only did it create employment opportunities, in particular it enabled the young K'ekchi' women trained as teachers to gain prominent positions in their villages that allow them to perform an important function in the gender-aware transformation process.

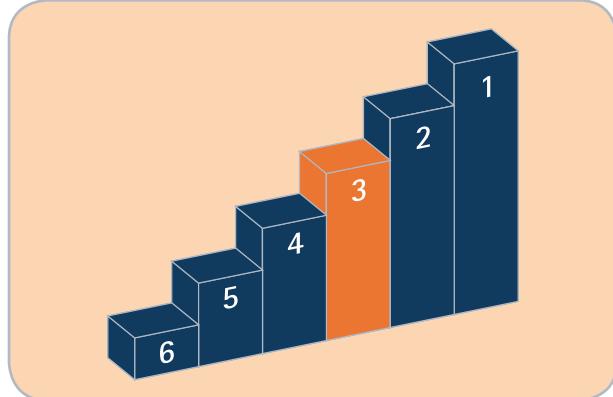
Other changes have also taken place in the region over the last ten years. Roads have been paved, villages have been connected to the power grid, and the agricultural production of non-traditional products such as flowers and vegetables for export has been expanded. These changes also influence the education sector, making it easier to obtain primary education and arousing people's interest in it.

The very welcome trends in the qualification of teachers and its further impacts can only be partly attributed to the FC project. What was at least as important was the introduction of the correspondence courses, although in the meantime this has resulted in the residential college capacities created as part of the project being underused. Given the pilot effect of the indigenous language teaching methods promoted by the project and the fact that the capacities no longer needed for teacher training are now being used for other developmentally sound training purposes benefiting the indigenous population, the project achieved generally **sufficient** developmental efficacy (rating 3).

# CHINA: WIND ENERGY.

## CHINA

Population	1,296.5 million
Area	9,600,000 km <sup>2</sup>
Annual population growth	0.7 %
Per capita income	USD 1,290
HDI rank (177 countries)	85
Literacy rate	91%
Life expectancy	71 years



Since 1978, when China began introducing reforms and opening its economy to the West, it has achieved high economic growth rates and made great progress in reducing poverty, which is still widespread particularly in rural regions. The rapid expansion of the nationwide power supply was a major precondition for the enormous economic growth. However, it has had adverse effects on the environment as China is still generating most of its electricity by burning its abundant domestic coal supplies. Sulphur and CO<sub>2</sub> emissions have increased dramatically as generating capacities have expanded, and now reach and even exceed critical thresholds, particularly in large conurbations. Should China's further economic development entail so much as a merely proportional increase in coal consumption, there will be an environmental problem of

not only national but global dimensions (greenhouse gases). China therefore very urgently needs to improve energy efficiency and make more extensive use of clean energy sources.

This is where the FC project came in, testing and financing the commercial use of large-scale wind farms for the first time after small-scale installations had been test-run. Wind farms were erected at four particularly exposed sites in the coastal provinces of Hainan, Zhejiang, Guangdong and Shandong. Their operation was taken over by regional production companies that had been specifically established for this purpose.

The development objective consisted in contributing towards strengthening the role of renewable energy sources and generating power without harmful emissions.





The efficacy of the project was initially measured by the electricity generated, permitting a direct inference of the CO<sub>2</sub> avoidance resulting from wind farm operation (as opposed to generation by thermal power plants).

At the time of project appraisal, installed wind energy capacity in China was only about 30 MW, mostly in very small decentralised units and test installations. The 36 MW capacity additionally installed under the FC project at an overall cost of EUR 36.8 million thus represented a significant increase.

The average energy generated by the FC-financed wind farm is 55 GWh each year. Despite this high figure, which is quite substantial for wind farms, it remained roughly 30% below the expectations. The main reasons were overestimation of the wind energy potential of the four locations because of unreliable ex ante measuring data and an initially high technical failure rate of the rotors due to material flaws, most of which have since been eliminated under the manufacturer's guarantee.

The projects have shown that industrial wind energy generation in China is a realistic alternative. Wind farms are now also being erected at many other locations in China. The overall installed capacity of the wind farms has now reached around 600 MW, which shows that this market is expanding very dynamically. Nevertheless, wind energy still meets only a very small proportion (less than 1%) of China's immense demand for energy.

From a microeconomic perspective, electricity from wind energy is still five to six times more expensive in China than energy generated from coal. The economic rationale of wind farms, however, is not primarily based on the return from the sale of electricity generated but on the costs of CO<sub>2</sub> emissions avoided. On the international market the sum of USD 10 for each tonne of CO<sub>2</sub> avoided was for a long time considered the ceiling. On the European spot market, CO<sub>2</sub> pollution rights have already traded at prices above EUR 30 per tonne. In mid-2006, however, the prices dropped again to around EUR 17 per tonne.

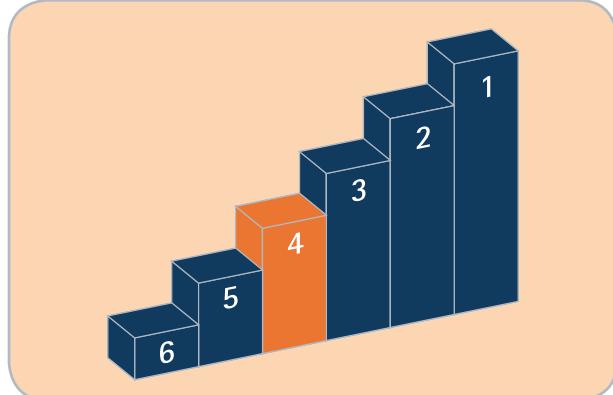
The CO<sub>2</sub> avoidance costs of the FC-financed wind farms in China are between USD 26 and USD 32 per tonne. This is clearly in excess of the reference values and means that the projects can currently not be considered as efficient solutions for the CO<sub>2</sub> problem in China. Nevertheless, the four wind farms prevent the emission of almost 65,000 tonnes of CO<sub>2</sub> each year in comparison with hard coal-fired thermal power plants.

In the meantime China has set up its own wind generator manufacturing industry, which has led to considerable cost reductions. Given the strong growth in demand, the equipment is expected to soon reach the profitability threshold as standardisation progresses and unit numbers rise. In conclusion, the FC project has contributed substantially towards enabling and accelerating the widespread introduction of a technological innovation. For this reason we rate the developmental efficacy of the programme as **sufficient (rating 3)** despite its continuing inefficiency.

# MOROCCO: IRRIGATED AGRICULTURE.

## MOROCCO

Population	30.6 million
Area	446,600 km <sup>2</sup>
Annual population growth	1.6%
Per capita income	USD 1,520
HDI rank (177 countries)	124
Literacy rate	51%
Life expectancy	69 years



In Morocco, as in most other developing countries, agriculture is the rural population's most important source of income by far; indeed, it is often the only source of income. Boosting agricultural productivity therefore plays a vital role in combating rural poverty. Wherever the natural environment permits, setting up irrigation systems can often lead to a substantial increase in productivity. Around 15% of arable land in Morocco is now being irrigated, which means that the irrigation potential has already been all but exhausted. Around 45% of Moroccan agrarian production and 85–90% of agricultural exports come from these irrigation areas.

The objective of the two FC projects Loukkos III (17.4 million in FC funds) and PAGI II (10.1 million in FC funds) was to improve and expand the production potential of an existing irrigation area (= perimeter) of 16,000 hectares. In the Loukkos III project, construction measures were intended to open up a net irrigation area of around 3,700 hectares. The PAGI II project was a programme which was connected to sectoral structural reforms and aimed at rehabilitating large perimeters. It was implemented jointly with the World Bank (lead agency) and the French development cooperation agency, Agence Française du Développement (AfD).

When the Loukkos III project was appraised (1982), there was still a considerable amount of state intervention in the Moroccan agricultural sector (e.g. state-prescribed crops, state-controlled marketing and further processing). The irrigation area was reserved for sugar cane. The project objective was to increase the income of farmers living in

the project area by boosting production. The aim was also to increase national self-sufficiency in food supply and to improve the employment situation in the project area. In 1994, when the PAGI II project was appraised, the Moroccan government, with the support of international donors, was liberalising agricultural policy (e.g. state withdrawal from processing and marketing, allowing the farmers to choose their crops). The objectives of the PAGI II project were to increase the agricultural autonomy of the parastatal operator of the irrigation plant (ORMVAL) and the farmers and to ensure that the provision of irrigation water was sufficient and in line with needs. Further aims were to improve the economic efficiency of agricultural production in the perimeter, to conserve the increas-





ingly scarce water resources and to secure the agricultural income of farmers in the project area.

The measures carried out as part of the Loukkos III project primarily concerned the development of facilities required for irrigated agriculture (e.g. building pumping stations, water distribution network, drainage networks), flood protection measures and laying roadways (a total of around 60 km). The PAGI II project focused on rehabilitating existing tracks and roads and parts of the pumping stations and on procuring equipment needed to operate the irrigation network and to improve water use.

All measures had been concluded by 2001. At the time of the ex post evaluation (2005), both projects provided evidence of a marked increase in the farmers' income. By expanding agricultural production, both projects had helped to increase national self-sufficiency in food supply.

However, closer scrutiny revealed that the tariffs collected from the farmers for irrigation water did not cover costs even on a nominal basis. Furthermore, sanctions cannot be enforced against farmers who do not pay their water charges because there is no legal basis to do so; in both projects this led to a very low willingness to pay (collection efficiency). Consequently, the state had provided a considerable volume of subsidies to keep the system in operation. However, these subsidies were not

sufficient to cover the cost of carrying out the amount of maintenance and repair work needed to keep the perimeter in good working order. Actual maintenance expenditure was only 50% of the required amount. At the time of the ex post evaluation there had already been a clear deterioration in some project components (e.g. tracks/roads) to the extent that they were not fully usable.

At the same time, market liberalisation and changes in global market conditions led to a decline in the prices that could be obtained for the main crop, sugar. The quality of the soil and the technical equipment allow only a limited changeover to alternative products.

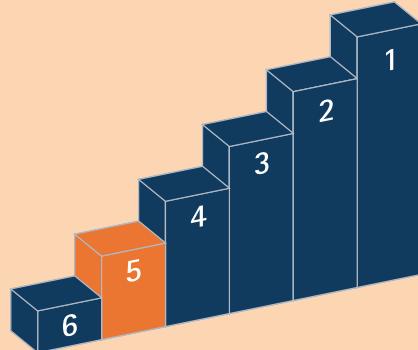
All in all, the developments that were achieved meant that the expected high economic returns were not achieved. Although the PAGI II project is still just economically viable, it is below the minimum support threshold (6% for a country such as Morocco), while the Loukkos III project even demonstrates a negative rate of return, i.e. from an economic point of view it would have been more appropriate to import the sugar rather than produce it. The increase in farmers' income was, and still is, subsidised.

Owing to the lack of sustainability and the insufficient efficiency, despite positive production and income development, the developmental efficacy of the two projects was assessed as **slightly insufficient (rating 4)**.

# ALBANIA: WATER SUPPLY IN KAVAJA, KUKES AND HAS.

## ALBANIA

Population	3.2 million
Area	28,750 km <sup>2</sup>
Annual population growth	0.5%
Per capita income	USD 2,080
HDI rank (177 countries)	72
Literacy rate	99%
Life expectancy	74 years



Compared with other transition countries, Albania continued to pursue a strictly socialist social and economic policy for a very long time. The overthrow of the Communist regime in 1990 was followed by a difficult transition process, which began to falter in 1997, when the exposure of fraudulent practices by dubious investment companies led to civil unrest that verged on civil war. Although Albania has since made convincing progress in terms of stabilisation and growth, it is still considered Europe's poor relation.

During the transition process hundreds of thousands of Albanians emigrated to other countries or moved from rural areas to the towns. There has been a 50% increase in the urban population but a 6% decrease in the total population. The urban infrastructure was already in a poor condition at the outset and absolutely unable to cope with the huge influx of people.

In the four towns in the programme, Kavaja, Kukes, Krume and Has, and their surrounding areas, the situation in the early 1990s regarding water supply was particularly bleak. Residents of the towns had water for no more than one to two hours a day. In multi-storey buildings, inadequate network pressure meant that the water did not reach the consumers. High water loss rates were a sign of inefficient management. Decaying networks let dirt into the distribution pipes, thus contaminating drinking water. A lack of water meters favoured a wasteful attitude to water use, leading to financial losses on the part of the water suppliers. Because of the urban supply problems, the people living in the areas around the towns were disconnected from the water supply at times and had to resort to using hygienically unsafe water sources to cover their water needs or to pay excessive prices for water on sale from travelling water merchants.





The objective of the FC project was to ensure that the population in the programme region had a minimum supply of drinking water. This included raising water supply connection rates to 90%, ensuring that water was available for several hours a day, providing water that was safe to drink, covering water consumption of 30 to 60 litres per capita/day and reducing losses to 10% of the water produced.

In the first phase of the project, the inner-city water supply systems were rehabilitated. In the supplementary project (Phase II) evaluated here, the supply systems in the areas around Kavaja, Rrogozhina, Kukes, Krume und Has were also rehabilitated and extended or renewed. Alongside these investment measures, the waterworks were given advice on technical and commercial management.

Five years after the programme plants in Phase II were put into operation, the developmental efficacy of the project was evaluated, with the following findings. The daily availability of water had improved at first but had since declined to the initial level of two hours a day. To make themselves less dependent on the unreliable water supply, the people filled their roof tanks with water as soon as it was available, enabling them to consume an average of 70 to 80 litres per capita/day. Filling roof tanks, however, was the cause of hydraulic problems and pressure fluctuations within the network and contributed, among other things, to the malfunction of the water meters that had been installed. Although water losses (technical losses, illegal consumption, unbilled water) were reduced in Kavaja and Rrogozhina to 35% – which was still unsatisfactory – in Kukes und Krume there was a dramatic increase in water losses to 57% and 82% respectively. In

parallel, the quality of the water in Kavaja and Kukes worsened, with some bacteriological contamination being detected. At 75%, the connection rate was well below expectations. The waterworks advisory measures which were part of the project made no profound impact. The advisory concept proved to be suboptimal because it was too short and too selective to take account of the Albanian partners' lack of awareness of the problems. Low wages at the waterworks meant that the employees were generally lacking in motivation. This led to deficiencies even in routine tasks such as production measurement, consumption measurement, campaigns to trace leaks, the identification of illegal connections, keeping customer records and preventive maintenance. The water supply companies thus ended up in a vicious circle of insufficient revenue, a lack of funds for investment, deteriorating structural materials and service quality, and a declining willingness among customers to pay.

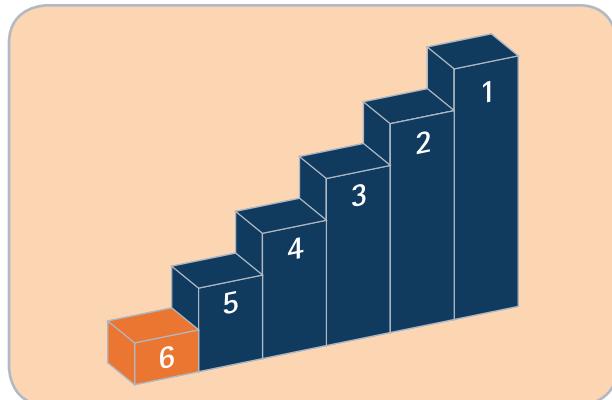
The investment costs per additional inhabitant supplied with water (20,000 people) were disproportionately high at EUR 326 per capita, especially given the low level of service. The tariffs do not even cover ongoing running costs (exception: town of Kukes), which means that there is a permanent need for subsidies.

The rapid deterioration of the operational condition of the programme plants means that only very limited benefit in terms of time and content was derived from the investment. Minimum water supply standards were not met; results were well below them in terms of both quality and quantity and at times they were below the initial level. The developmental efficacy of the project was therefore classified as clearly **insufficient (rating 5)**.

# GUINEA:

## ENERGY SECTOR PROGRAMME.

GUINEA	
Population	8.1 million
Area	245,900 km <sup>2</sup>
Annual population growth	2.2%
Per capita income	USD 460
HDI rank (177 countries)	156
Literacy rate	41%
Life expectancy	46 years



With an average annual per capita income of only around EUR 330, the West African country of Guinea is one of the poorest countries in the world. Not least because of its uncertain political situation and tension in the neighbouring countries of Côte d'Ivoire, Liberia and Sierra Leone, the economic growth rate, which averaged around 4% over the past 10 years, has recently slowed considerably. Forty per cent of the population live below the national poverty line and in rural regions this proportion is over 50%. Vast parts of the country are without a basic social and economic infrastructure.

The country's power supply is concentrated essentially on the capital, Conakry, and its surroundings, and on the town of Kindia, which is connected by a transmission line. The Conakry-Kindia supply area consumes approximately 90% of the country's power. The remainder is shared among remote, isolated networks that are supplied by small diesel power plants and run-of-river power plants. Only 11% of Guinea's population of nearly 8 million have access to electricity. Whereas the connection rate in urban areas is 33%, it is below 2% for the rural population.

The FC project was designed as one of several measures in a sector programme financed by multilateral donors. The aim was to put Guinea's electricity sector on a sound economic footing through far-reaching reforms (which included reorganising the executing agency, contracting a private operator and adjusting tariffs). The key problem identified in the project appraisal was the inability of the institutions in the power sector to operate and expand the power supply infrastructure in a technically

appropriate manner and on a healthy financial basis. In the early 1990s peak power demand was 70 MW, while assured capacity was only 44 MW, which meant chronic power cuts. Grid losses and power theft increased dramatically. The technical and non-technical grid losses were far above 30%. Only around one-third of the power generated led to cash-flow-relevant revenues. In consequence, the state power utility ENELGUI went bankrupt.

The amount of EUR 5.1 million initially made available for the FC project was to be used for minor rehabilitation measures to be performed on the Tombo thermal power plant and for the construction of a new load dispatch centre. The rehabilitation of the power plant was completed by May 1996. In view of the persistent unwillingness of the Guinean government to introduce reforms, the alarming financial situation of the sector and the significant sustainability risks, the decision was made in agreement with the German federal government to postpone construction of the load dispatch centre until significant progress in sector rehabilitation was evident. The failure of the private operator in 2001, the persistent reluctance of the Guinean government to carry out reforms and the fact that a load dispatch centre can make only a minor contribution to resolving the existing sectoral problems ultimately led to the termination of FC activities in Guinea's electricity sector at the end of 2002.

The final evaluation of the sector programme and of the incorporated FC project revealed numerous deficiencies in both planning and implementation. Although the still unresolved main problem was correctly identified by



the donor community, the extent of the misguided sector developments and the possible ways of correcting them were not analysed properly. The significant political risks associated with the reform programme that was initiated were underestimated. The underlying contractual and institutional conditions for including the private sector as an operator proved to be inadequate and could not be corrected afterwards. Although the government of Guinea agreed to use the sector reform programme designed by the donor community as a precondition for the implementation of an investment programme, the government then failed to demonstrate "ownership". The investment programme consisted of a number of individual measures whose coordination required management capabilities which the programme executing agency did not possess. The donors, in turn, were not able to reach an agreement on how to implement covenants and accords or on how to assess progress with the sector reforms. As a consequence, German FC was the only donor that refused to disburse committed funds on the grounds of non-fulfilment of the reform agenda and the poor financial condition of the sector.

Even if no indicator was defined to measure achievement of the overall objective, the development of the project and the sector environment indicated that it was not possible to provide an economically efficient power supply or to reform the project executing agency. The

supply gaps did not decrease despite the rehabilitation measures and the construction of additional generating capacity. There was hardly any improvement in the condition of the sector infrastructure or in the financial situation of the power supplier. The sector reforms, which were inadequately prepared and then only half-heartedly commenced, came to a standstill or were even reversed.

Measured in terms of the indicators of the achievement of the programme objectives, the project clearly failed. Nearly all the criteria defined by the World Bank to measure the success of the sector programme failed to be met (no cost-covering tariffs, operator model a failure, etc). Solely the fact that most of the planned investments were carried out can be regarded to a certain extent as a success. As the measures were not sustainable this effect was short-lived. The intended impacts of the investments either failed to materialise or arose only temporarily. In the case of investments agreed for financing through German FC, the disbursement of the FC funds eventually had to be cancelled for the largest component (load dispatch centre) owing to the persistent reluctance of the Guinean government to introduce reforms. The financial contribution of EUR 5.1 million was reduced to the disbursed amount of EUR 1.6 million and the remaining EUR 3.5 million was reprogrammed in favour of a project in the health sector.

Overall, the project was a **total failure (rating 6)**.



## 5. ANNEX.

### EVALUATION METHOD USED BY KFW ENTWICKLUNGSBANK.

How is the developmental efficacy of Financial Cooperation (FC) projects rated and what can we learn for ongoing and future projects? These questions are the focus of the work of the independent FC evaluation unit at KfW Entwicklungsbank.

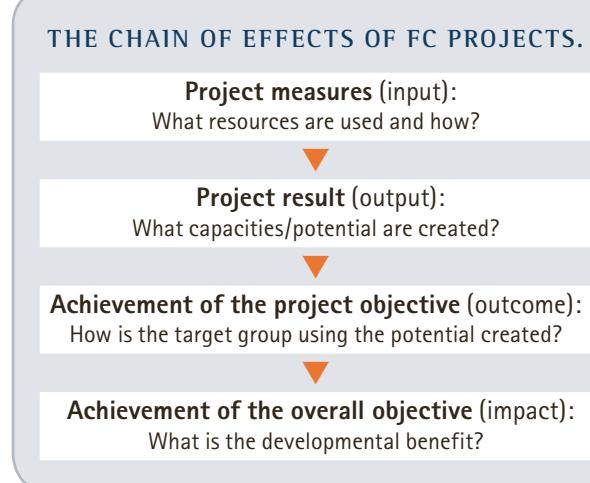
The first step in the final evaluation is a "qualified" comparison of the objectives set at the time of the project appraisal and the results actually achieved at the time of the ex post evaluation. The comparison is "qualified" in the sense that what is examined is whether the objectives defined in the project appraisal are still in line with the current state of the art. On average, a period of around ten years elapses between project appraisal and ex post evaluation. During that time the development policy debate has moved on and further knowledge about impact chains and interrelationships has been acquired. If this has led to a change in developmental concepts, objectives or the level of target requirements that is relevant to the project, the evaluation of the project achievements is based on the appropriate target from today's perspective rather than the original target. This "tightening" of the evaluation standards, which has definitely not yet been adopted by all institutions as part of international evaluation practice, shows that KfW Entwicklungsbank is not merely interested in finding out whether a pre-established concept has been implemented properly but, in particular, in determining what developmental effects can be attributed to the project in accordance with what we know today.

**Learning** and **accountability** are the two overarching evaluation objectives. In the ex post evaluation, checking how funds have been used and the results obtained is the means of meeting the accountability objective regarding the use of German taxpayers' money. For the institutional learning process, the evaluation of individual projects is used as a kind of object of investigation to derive positive and/or negative experience which is applied to the execution of similar ongoing or new projects. This also includes experience from the cooperation with other donors and lessons that are relevant for the further development of sectoral, regional or thematic promotional concepts and their practical implementation.

### ALL COMPLETED PROJECTS ARE REVIEWED.

Ex post evaluation is not merely limited to identifying the effects produced; for all FC projects, it means reviewing the entire process once again from project identification to the operational stage. This is the only way of pinpointing the reasons for project success or failure and drawing conclusions for future projects. Among other things, an analysis is made of whether the "core problem" was correctly identified when the project was appraised, whether the development of the project environment including the underlying sectoral conditions and the development of demand and prices was correctly forecast and whether an appropriate solution was found for the previously identified "core problem". A comparison of the objectives and the results actually achieved is taken as the basis for analysing whether the solution identified was implemented according to plan and, most of all, efficiently. Then an assessment is made of whether the project functions as planned and delivers the desired results and more far-reaching developmental impacts.

In fact, this procedure is used to analyse the entire chain of cause and effect which was taken as the basis for the FC project when it was appraised using a logical framework model:



## THE THREE SUCCESS CRITERIA: EFFECTIVENESS, SIGNIFICANCE/ RELEVANCE AND EFFICIENCY.

The success rating of the projects is derived from the three key criteria of **effectiveness** (contribution of the project to actual effects at the level of the project objective), **significance/relevance** (contribution of the project to actual effects at the level of the overall objective) and **efficiency** (economic efficiency in achieving the results and objectives).

- Under the **effectiveness** criteria, what is assessed is a project's (intended and unintended) impact – what has actually occurred and what can be expected in the future – in terms of its immediate benefit for the target group. The positive, intended impacts are reflected in the project objectives. To actually be able to rate the effectiveness, the project objectives have to be expressed as specific production and supply levels and acceptable limits must be defined for the expected negative side effects.
- Under the criteria of **relevance** and **significance**, what is assessed are the sustainable effects of a project on a development-policy level above the project objectives. Under relevance, the extent to which an impact is a developmental priority (relevant) is assessed, whereas significance measures the strength of a project's influence at this level. As with the project objective, all effects (including unintended and negative effects) are incorporated into the evaluation.
- The review criterion of **efficiency** centres on cost-effectiveness. This issue here is whether the operational and economic input involved in producing the goods and services (production efficiency) and achieving the results (allocation efficiency) is appropriate over the long term.

We do not treat **sustainability**, a key aspect of project evaluation, as a separate evaluation category but as a theme that cuts across all three evaluation criteria. A project is sustainable if the project-executing agency and/or the target group is/are able to continue to use the project facilities that have been created for a period of time that is, overall, adequate in economic terms, or to carry on with the project activities independently and generate positive results after the financial, organisational and/or technical support has come to an end.

## THE SIGNIFICANCE OF INTENDED AND UNINTENDED EFFECTS FOR THE SUCCESS RATING.

What is evaluated are project effects that can actually be observed at the time of the ex post evaluation and can realistically be expected to last beyond the life of the project. Besides the occurrence of the expected project effects (project outcome, project objectives and overall objective), the unintended positive and negative project impacts at every level are included in the analysis (e.g. unintended negative environmental effects). The success rating can be highly compressed and reduced to the simple question of whether the way that the evaluated project was conducted could still be recommended from today's perspective (i.e. if a new review were to be carried out, in which account were taken of the developments and effects that actually occurred and today's evaluation standards were applied). Only if a positive answer can be given to this question, in other words if the net developmental benefit of the project is beyond dispute, is a project rated successful. Accordingly, projects which have made a positive contribution – but one that was, however, insufficient to justify the efforts involved – are also considered unsuccessful.

## THE SIX-POINT RATING SYSTEM.

The success rating applied by the independent evaluation unit at KfW ranks successful and unsuccessful projects according to a rating system that has six levels, which range from 1 (very good and good developmental efficacy) to 6 (total failure). Projects with ratings 1 to 3 are deemed to be developmentally successful. Measured in terms of current standards, these projects have long-term positive net developmental effects. Projects rated from 4 to 6 are considered to be developmentally unsuccessful. They do not fully meet the minimum performance requirements for developmental efficacy or reveal serious sustainability risks.

The six ratings are defined as follows:

### Rating 1: Very high or high degree of developmental efficacy

According to the relevant evaluation criteria, the project meets all requirements well or very well. The project is given an unqualified positive evaluation. The project is an appropriate example of "best practice".

**Rating 2: Satisfactory developmental efficacy**

The project either meets all pertinent criteria equally in a satisfactory manner or it fully offsets weaknesses in some areas by exceptionally positive effects in other areas.

**Rating 3: Overall sufficient degree of developmental efficacy**

Either across the board or – in terms of the dimension of the individual effects – overall, the project achieves sufficient developmental efficacy. There may be considerable deficiencies in some areas provided that they are offset by extraordinarily positive impacts in other areas. There are no deficiencies in any area so serious that, despite all other project effects, they inevitably lead to a less favourable overall rating (ratings 4-6).

**Rating 4: Overall slightly insufficient degree of developmental efficacy**

Overall, the project falls slightly short of the minimum requirements for developmental efficacy. This can imply both a result that across the board falls just short of the mark and insufficient offsetting of serious deficiencies in individual areas.

**Rating 5: Clearly insufficient developmental efficacy**

The project clearly fails to meet the minimum requirements but making further use of the facilities created is still a more favourable solution than terminating the project or its operation.

**Rating 6: The project is a total failure.**

For the most part, the project is useless, or the negative effects are so serious or outweigh the positive effects to such an extent that the project has either already been terminated and its operation been discontinued or such a step is necessary owing to its uselessness or in order to limit the damage.

## ABBREVIATIONS.

BMZ	Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)
CP	Cooperative project
DC	Development cooperation
FC	Financial Cooperation
GTZ	German Agency for Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit)
GWh	Gigawatt hours
HDI	Human Development Index
NGO	Non-governmental organisation
PRSP	Poverty Reduction Strategy Paper
SME	Small and medium-sized enterprises
TC	Technical Cooperation

# PROJECT LIST.

Country	Name of project	FC contribution (EUR million)	Performance rating
<b>SOCIAL INFRASTRUCTURE – EDUCATION.</b>			
Bangladesh	Comprehensive Primary Education Project Rajshahi I	22.0	2
Bangladesh	Comprehensive Primary Education Project Rajshahi II	2.6	2
Bolivia	Social Investment Fund II	7.7	2
Dominican Republic	Primary School Construction Programme	8.2	3
Dominican Republic	Social Investment Fund PRO-COMUNIDAD	7.7	4
Egypt	Construction of Primary Schools I/II	34.3	2
Egypt	Construction of Primary Schools III	17.4	2
El Salvador	Health Science Institute Icas	4.1	3
Guatemala	Teacher Training Centre run by the Salesians	4.1	3
Guatemala	Rural Primary Education - PRONADE	10.2	2
Honduras	Promotion of Primary Education	10.2	5
Palestinian Territories	Employment Programme II	1.8	2
Peru	Primary Education Programme (Advanced Teacher Training)	9.1	3
Thailand	Thai-German Institute	5.1	3
Yemen	Construction and Rehabilitation of Primary Schools in Ibb and Abyan Provinces	6.1	3
<b>SOCIAL INFRASTRUCTURE – HEALTH CARE.</b>			
Bolivia	Social Investment Fund I	10.2	2
Burkina Faso	Rehabilitation of Health Centres	3.7	4
Indonesia	Basic Health and Food Programme	14.8	3
Jamaica	Rehabilitation of Two Hospitals	4.6	3
Pakistan	Children's Hospital Quetta	15.9	4
Togo	Rehabilitation of Primary Health Centres in Central Region	2.8	4
Vietnam	Sector Programme Health Care and Family Planning I	3.9	2
<b>SOCIAL INFRASTRUCTURE – POPULATION POLICY.</b>			
Bangladesh	Health and Population Programme V	23.0	3
Bangladesh	Health and Population Programme V, 2nd Tranche	5.1	3
India	Population Programme (Social Marketing)	7.7	4
Pakistan	Family Planning Programme II (Social Marketing of Contraceptives)	9.5	2
Tanzania	Sector Programme Family Planning I	3.1	2
Tanzania	Sector Programme Family Planning II	2.0	2

Country	Name of project	FC contribution (EUR million)	Performance rating
<b>SOCIAL INFRASTRUCTURE – WATER SUPPLY AND SANITATION/WASTE MANAGEMENT.</b>			
Albania	Water Supply Kavaja/Kukes/Has II	6.6	5
Burkina Faso	Water Supply Bobo-Dioulasso	21.3	1
Burkina Faso	Rural Water Supply Sourou	5.1	1
Cameroon	Water Supply Bafoussam	15.7	4
China, People's Republic	Guangzhou Wastewater Disposal	9.5	4
China, People's Republic	Qingdao Wastewater Disposal	12.8	2
Ecuador	FISE II (Basic Sanitation Programme II)	7.2	3
Guatemala	Rural Water Supply and Sanitation Programme I	5.5	3
Guatemala	Rural Water Supply and Sanitation Programme II	7.7	3
Guatemala	Rural Water Supply and Sanitation Programme III	5.1	3
Indonesia	Water Supply Bengkulu	10.2	5
Indonesia	Water Supply Palembang	18.6	4
Jordan	Water Supply in Wadi Mousa	4.3	3
Kenya	Water Supply Malindi and Surroundings (preparatory project)	0.7	2
Kenya	Water Supply Malindi and Surroundings (main project)	15.7	2
Laos	Water Supply Luang Prabang, Phase I	0.6	2
Laos	Water Supply Luang Prabang, Phase II	4.5	2
Maldives	Water Supply and Sanitation Male, Phase II	2.5	2
Mauritania	Rural Water Supply South-East Mauritania	1.9	5
Mozambique	Rural Water Supply (Emergency Drought Relief)	5.1	4
Namibia	Water Supply System Ogongo-Oshakati	18.9	4
Namibia	Water Supply East Caprivi	5.6	4
Nigeria	Water Supply Birnin Gwari	4.6	4
Peru	Drinking Water Supply and Sewage Disposal Trujillo	17.5	3
Uganda	Water Supply and Sewage Disposal	10.3	3
Vietnam	Water Supply for the Town of Viet Tri	10.7	2
Zambia	Water Supply and Sewage Disposal Chiapata II	4.1	3
<b>SOCIAL INFRASTRUCTURE – STATE/CIVIL SOCIETY/OTHER.</b>			
Burkina Faso	Self-Help Fund in the East I	1.5	3
Egypt	Social Fund (SFD) III	25.1	3
El Salvador	Slum Rehabilitation Las Palmas	6.9	1
Honduras	Low-Cost Housing Construction in Rural Areas III	5.1	3
India	Housing Development Finance Corp (HDFC II)	15.3	2
Nicaragua	Social Investment Fund Programme (FISE) III	12.8	3
Palestinian Territories	Employment Programme I	4.6	2
Palestinian Territories	Employment Programme III	2.0	2
Sierra Leone	Reconstruction of Rural Infrastructure II	0.3	2

Country	Name of project	FC contribution (EUR million)	Performance rating
<b>ECONOMIC INFRASTRUCTURE – TRANSPORT.</b>			
Bangladesh	Flood Damage Repair on Rural Roads	2.6	1
Bangladesh	Hatubhangha Bridge	2.2	1
Bangladesh	Rural Roads and Markets Tangail II	7.7	1
Bangladesh	Supply of Main-Line Locomotives	39.6	4
Burkina Faso	Ouagadougou-Boromo Highway	12.1	3
Burkina Faso	Rehabilitation of the Namassa-Bourzanga Dirt Road	2.6	3
Burkina Faso	Rehabilitation of the Ouagadougou-Namassa Highway	3.7	3
Burundi	Rural Infrastructure Ruyigi Province	3.1	5
Cameroon	Second Tugboat for Douala Seaport	6.3	2
Cameroon	Sector Programme National Railways	19.0	2
Chad	Rehabilitation of Guélengdeng-Bongor-Eré Highway	47.2	2
Chad	Road Surface Renewal Ouaddai	4.6	2
China, People's Republic	Underground Guangzhou	174.8	2
China, People's Republic	Underground Shanghai I	215.5	2
China, People's Republic	Underground Shanghai II	233.1	2
Egypt	Rehabilitation of Baharia Railway Line I	11.0	4
Egypt	Rehabilitation of Baharia Railway Line II	48.2	4
Egypt	Spare Parts for the General Overhaul of Locomotives	26.6	4
El Salvador	Rehabilitation of Acajutla Seaport	11.9	3
Indonesia	Rehabilitation of Main-Line Locomotives I	10.3	3
Indonesia	Rehabilitation of Main-Line Locomotives II	8.5	3
Lesotho	Labour-intensive Road Construction IV	1.5	4
Lesotho	Labour-intensive Road Construction V	2.7	4
Malawi	Road Maintenance Programme II	6.1	3
Malawi	Road Maintenance and Bridge Construction Programme	7.7	3
Namibia	Rehabilitation of Oshivelo-Oshakati Highway	15.3	2
Namibia	Trans-Caprivi Highway I	12.4	2
Namibia	Trans-Caprivi Highway II	14.3	2
Nepal	Expansion of Maleku-Dhading Besi Highway	7.3	2
Tanzania	Maintenance and Rehabilitation of Diesel Locomotives II	2.6	3
Tanzania	Maintenance and Rehabilitation of Diesel Locomotives III	8.0	3
Tanzania	Maintenance and Rehabilitation of Diesel Locomotives IV	7.2	3
Tanzania	Improvement of Telecommunications TRC I	5.4	3
Tanzania	Improvement of Telecommunications TRC II	6.6	3
Tanzania	Railway Bridge Renewal Phase VI	5.1	3
Tanzania	Railway Bridge Renewal Phase V	5.9	3
Thailand	Sector Programme Railways II	2.6	4

Country	Name of project	FC contribution (EUR million)	Performance rating
<b>ECONOMIC INFRASTRUCTURE – COMMUNICATIONS.</b>			
Cambodia	Telecommunications I	7.7	3
Rwanda	Rehabilitation of Radio Rwanda	4.1	3
<b>ECONOMIC INFRASTRUCTURE – ENERGY.</b>			
Bolivia	Electrification Larecaja	15.2	5
Burundi	110 kV Line Bujumbura-Gitega	8.1	5
China, People's Republic	Wind Farm I (Hainan and Zhejiang)	5.9	3
China, People's Republic	Wind Farm II (Guangdong and Shandong)	6.1	3
Georgia	Emergency Aid Programme Energy I	15.3	3
Georgia	Emergency Aid Programme Energy II	6.6	3
Georgia	Emergency Aid Programme Energy III	20.5	5
Guinea	Sector Programme Power Supply Conakry	1.6	6
India	Waste Heat Boilers/Steam Turbines, Generators Uran Power Plant	78.7	3
India	Rehabilitation of 4x108 MW Gas Turbine Power Plant in Uran	6.5	3
Indonesia	Diesel Stations V	21.6	4
Jamaica	Rehabilitation of Five Small Hydropower Plants	10.7	1
South-East Europe	Emergency Aid Programme Energy – Emergency Measures	5.0	3
South-East Europe	Emergency Aid Programme Energy I (Kosovo)	4.1	2
South-East Europe	Emergency Aid Programme Energy I (supplement)	5.1	2
South-East Europe	Emergency Aid Programme Energy Phase II	6.6	2
South-East Europe	Emergency Aid Programme Energy Phase III	2.0	3
South-East Europe	Emergency Aid Programme Energy Phase III (supplement)	5.1	3
Sri Lanka	Diesel Power Plant Sapugaskanda	24.0	2
Vietnam	Rehabilitation of Dray H'Linh Hydropower Plant and Distribution Network	6.6	4

Country	Name of project	FC contribution (EUR million)	Performance rating
<b>FINANCIAL SECTOR.</b>			
Azerbaijan	Promotion of the Private Sector I	6.9	1
Azerbaijan	Promotion of the Private Sector II	3.6	1
Egypt	Promotion of Private Industry / Environmental Protection	32.7	3
Egypt	SFD I (Promotion of Micro Enterprises)	5.1	4
Egypt	SFD II (Promotion of Micro and Small Enterprises)	5.1	4
Georgia	Georgian Micro-Finance-Bank	2.6	1
Georgia	ProCredit Bank, Georgia (PCBG)	2.5	1
Honduras	Housing Improvement in Urban Fringes III	7.7	3
Honduras	Housing Improvement in Urban Fringes IV	5.4	3
Indonesia	Credit Line Industrial Pollution Control	8.4	3
Kazakhstan	Credit Line for SMEs	13.8	2
Kyrgyzstan	Sector Programme Textile Industry	2.3	5
Kyrgyzstan	Promotion of the Private Sector I	7.3	5
Kyrgyzstan	Promotion of the Private Sector II	2.6	5
Philippines	Promotion of Small Enterprises II	3.5	4
Philippines	Industrial Pollution Control I	5.2	2
Serbia and Montenegro	Promotion of SMEs through the Financial Sector I	9.2	1
Serbia and Montenegro	Promotion of SMEs through the Financial Sector II	4.5	1
Serbia and Montenegro	Promotion of SMEs through the Financial Sector III	5.0	1
Tunisia	Development Bank BNA I	19.9	5
Uganda	Development Bank DFCU I	2.0	3
Uganda	Development Bank DFCU II	2.6	3
Uganda	Development Bank DFCU III	2.6	3

Country	Name of project	FC contribution (EUR million)	Performance rating
<b>SUPRASECTORAL/STRUCTURAL AID.</b>			
Bolivia	Rural Infrastructure (FDC II)	5.1	3
Bolivia	Earthquake Relief	1.1	1
Burundi	Emergency Programme for Burundi	6.6	3
Guatemala	Tropical Forest Conservation Petén/PROSELVA	10.4	5
India	Multi-Purpose Cyclone Shelters Orissa	2.6	2
Mozambique	Structural Aid VI	3.7	2
Peru	Resettlement Programme Ayacucho	7.7	3
Sierra Leone	Reconstruction of Rural Infrastructure	2.7	2
Tanzania	Resource Protection and Buffer Zone Development I	3.0	4
Tanzania	Resource Protection and Buffer Zone Development II	1.4	5

Country	Name of project	FC contribution (EUR million)	Performance rating
<b>PRODUCTION SECTOR – AGRICULTURE, FORESTRY, FISHERY.</b>			
Bangladesh	Compartmentalisation Pilot Programme	6.9	2
Benin	Forestry and Timber Industry V	2.9	3
Bolivia	Rural Emergency Programme (FDC)	5.1	3
Bolivia	Natural Resources Conservation Santa Cruz	7.6	3
Bulgaria	Maritza Wholesale Market	4.5	4
Cape Verde	Reforestation on Fogo and Santiago	2.6	4
Egypt	National Drainage Project	25.6	2
India	Erosion Control Karnataka I	3.8	5
Jordan	Sector Adjustment Programme Agriculture	15.3	4
Madagascar	Rice Project Betsiboka	17.4	5
Madagascar	Rice Project Betsiboka III	9.3	5
Madagascar	Rice Project Betsiboka IV	8.7	5
Madagascar	Rice Project Betsiboka V	9.7	5
Morocco	Agricultural Development in Had Kourt-Ouezzane	18.3	2
Morocco	Regional Agricultural Development Loukkos, Irrigation Sector	17.4	4
Morocco	PAGI II	10.9	4
Niger	Erosion Control Tahoua and Tillabéry, Phase III	4.3	2
Pakistan	Forestry Project Tarbela/Mangla	6.6	2
Thailand	Maintenance of Irrigation Projects (MIP) II	15.2	5
Tunisia	Irrigation of the Lower Medjerda Valley and Ras Djebel	25.0	3
<b>PRODUCING SECTOR – MANUFACTURING, MINING, CONSTRUCTION.</b>			
Nepal	Rehabilitation of Chobhar Cement Factory	12.0	5

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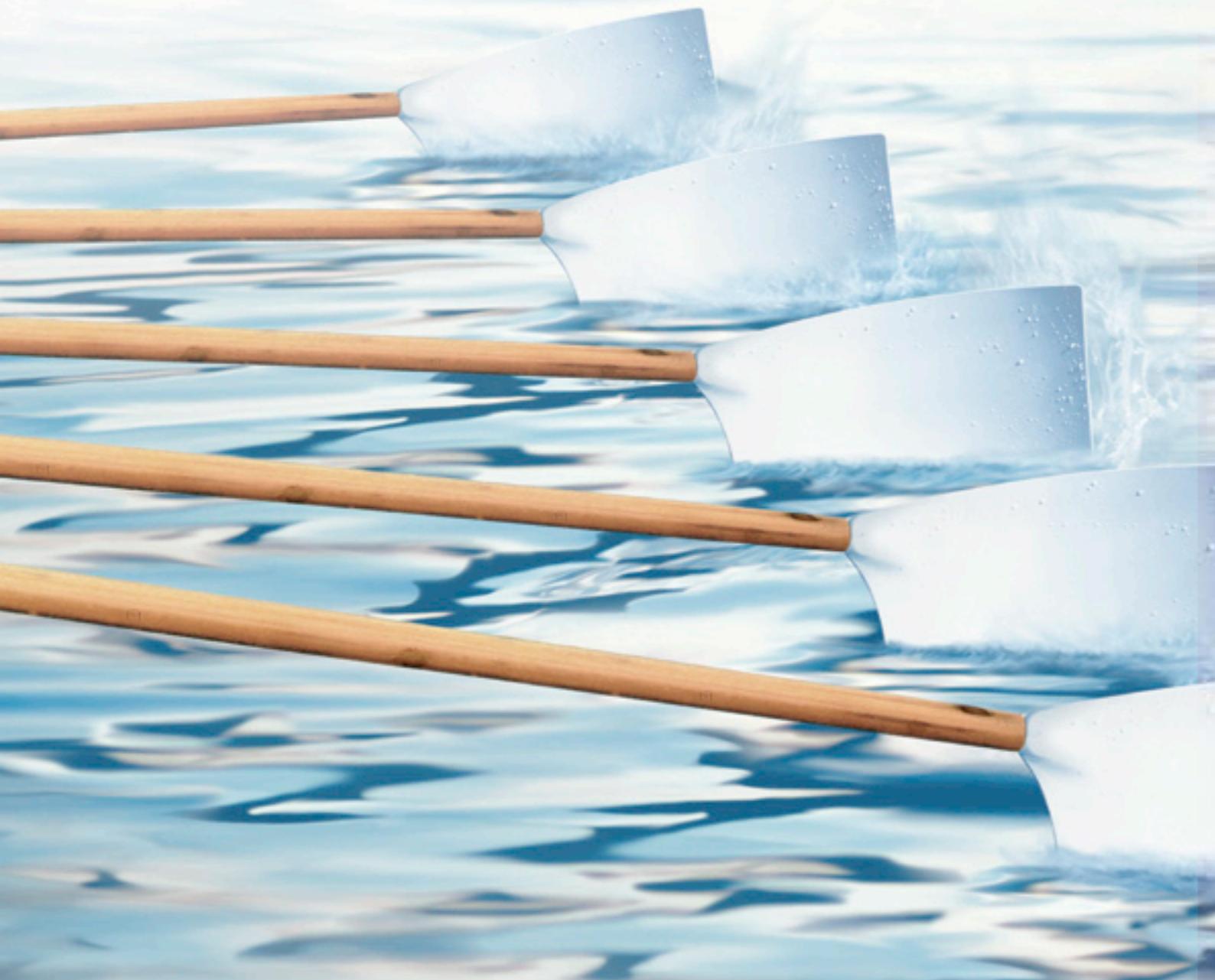
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As of November 2006

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KfW Bankengruppe (KfW banking group) gives impetus to the economy, society and ecology worldwide. As bankers we strive to work efficiently every day. As promoters we stand for the meaning and sustainability of our actions. The proceeds from our work flow back into our promotional activities and help to secure our promotional potential in the long term. As a creative bank we not only encourage innovations, but we ourselves also develop new financing instruments for our customers and partners. Our expertise and experience are packaged as five strong brands.



**KfW Förderbank (KfW promotional bank):** This is the right address for all measures in the product areas of construction, infrastructure, education, social services and the environment. Through low-interest loans we help many people to realise their dream of owning their own home, just as we promote interest in environmentally friendly modernisation measures. As KfW Förderbank we also provide support for companies investing in environmental and climate protection, municipal infrastructure measures and initial and further training.

**KfW Mittelstandsbank (KfW SME bank):** The name says it all. This is where we bring together all our promotional activities for business founders and small and medium-sized enterprises. These include, on the one hand, classic long-term loans and, on the other, innovative programmes aimed at strengthening the companies' equity base. Both are offered to our customers through their regular bank. Providing target-oriented advice is naturally also part of everyday business.

**KfW IPEX-Bank:** As part of KfW Bankengruppe, KfW IPEX-Bank is in charge of project and enterprise funding in Germany and abroad, as well as trade and export financing. It is customer-oriented and competitive and operates at standard market conditions. For companies with international operations it is a reliable long-term partner that can provide them with customised financing. The financing solutions that KfW IPEX-Bank offers its customers include structured finance, project finance, corporate loans and traditional export finance. The success of KfW IPEX-Bank is primarily due to its many years of experience of working all over the world in the most important markets and industry sectors.

**KfW Entwicklungsbank (KfW development bank):** On behalf of the German federal government it finances investment and advisory services in developing countries. It typically works together with governmental institutions in the countries concerned. Its aim is to build up and expand a social and economic infrastructure and to create efficient financial institutions while protecting resources and ensuring a healthy environment.

**DEG:** As a partner of the private sector, DEG supports companies seeking to invest in developing and reforming countries. It provides financing for profitable, environmentally friendly and developmentally effective projects in all economic sectors. In this way it lays the foundation for sustainable economic growth – and gives the people in these countries a better quality of life.

KfW Bankengruppe has also become a strategic partner of business and politics. As an adviser to the German federal government we provide expertise in the privatisation of federally owned companies. On behalf of the government we also handle business for the Federal Agency for Special Tasks Associated with Unification (Bundesanstalt für vereinigungsbedingte Sonderaufgaben, BvS) and the Compensatory Fund of Securities Trading Companies (EdW).

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