

# Ex post evaluation - Cambodia

# **>>>**

Sector: CRS code 23040 (Energy)

Programme/Project: "230 kV Transmission Line Kampot-Takeo" (STK) (BMZ No. 2001 66 264)\*; "Rural electrification" (RE I) (BMZ No. 2005 66 133); "Rural electrification" (RE II) (BMZ No. 2007 66 022)\*

Implementing agency: Electricité du Cambodge, EdC

## Ex post evaluation report: 2020

EUR million	STK/RE I (Planned)	STK/RE I (Actual)	RE II (Planned)	RE II (Actual)
Investment costs (total)	25.2	25.2	4.8	4.8
Counterpart contribution	7.1	7.1	0.8	0.8
Funding	18.1	18.1	4.0	4.0
of which BMZ funds	18.1	18.1	4.0	4.0
*) Random sample 2017				



**Summary:** Since the elections in 1993, the international donor community has been supporting the reconstruction of the energy infrastructure in Cambodia that was destroyed by war and civil war, with the aim of increasing the number of households with access to electricity. The FC measures of "230 kV Transmission Line Takeo-Kampot" (STK), "Rural electrification" (RE I) and "Rural electrification" (RE II) should be construed in this context. In spite of delayed commitments, they are considered to be holistic project approaches. The project measures comprise three components: i) construction of a roughly 70-km-long 230 kV double circuit line between the provincial towns of Takeo and Kampot, ii) construction of a 230/22 kV substation near Kampot, and iii) construction of an extensive 22 kV power distribution system in the project region. Given that RE I complements STK, and the project measures were implemented at the same time, the measures cannot be differentiated from one another in terms of effect and so they are evaluated together. RE II, as a rural electrification measure, is evaluated separately.

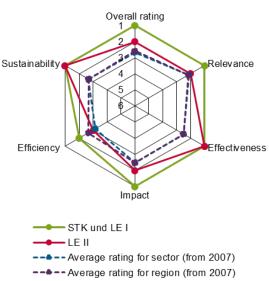
**Development objectives:** The common goal of the measures was to create a reliable and cost-effective supply of electricity in rural areas in line with demand (Outcome). The overarching development goal was to reduce poverty (MDG 1) and substantially improve the social and ecological sustainability (MDG 7) of the population's living standards (Impact). Measure RE II was also designed to reduce rural depopulation.

**Target group:** The project's target group comprised users of electricity in the project region (private individuals and business consumers). The 230 kV transmission line in the project benefited electricity consumers throughout the entire country.

# Overall rating: 1 (STK and RE I), 2 (RE II)

**Rationale:** The project makes a significant contribution to ensuring a sustainable, reliable and cost-effective supply of electricity, which paves the way for the further development of the country in the long run. All of the target indicators were achieved for RE II, and surpassed for STK and RE I. The development of the network infrastructure is deemed an efficient way to sustainably ensure the supply of electricity in Cambodia in the long term. The use of diesel power plants dropped sharply immediately after the implementation of the measures. The living standards of the target group improved markedly thanks to the measures, and the prices of electricity dropped significantly in both urban and rural areas. The measure will continue to exert positive effects even after it is completed.

**Highlights:** The implementing agency operates the facilities very professionally and with a high level of commitment. This secures the sustainability of the project in the long run.





# Rating according to DAC criteria

# Overall rating: 1 (STK and RE I), 2 (RE II)

Given that RE I complements STK, and the project measures were implemented at the same time, the measures cannot be differentiated from one another in terms of effect and so they are evaluated together. As a rural electrification measure, RE II was implemented later and is evaluated separately.

# Ratings:

	STK and RE I	RE II
Relevance	1	2
Effectiveness	1	1
Efficiency	2	3
Impact	1	2
Sustainability	1	1

#### General conditions and classification of the project

Since the elections in 1993, the international donor community has been supporting the reconstruction of the energy infrastructure in Cambodia that was destroyed by war and civil war. However, in 2000 only 9 percent of rural households had access to electricity, while throughout the entire country of Cambodia this figure was 17 percent of households. Even compared to the neighbouring countries of Vietnam (86 percent), Thailand (82 percent) and Laos (43 percent) this was a very low percentage, while electricity costs in Asia were high (World Development Indicators).

It was in this context that commitments were made to the FC measures of "230 kV Transmission Line Takeo-Kampot" (hereinafter referred to as STK, Appraisal report, 27 December 2004), "Rural electrification" (hereinafter referred to as RE I, Appraisal report, 29 December 2006) and "Rural electrification II" (hereinafter referred to as RE II, Appraisal report, 11 June 2008). Measure 1 (STK) comprised the construction of a 230 kV double circuit line between the provincial capitals of Takeo and Kampot as well as the construction of a 230/22 kV substation near Kampot, including a connection to the municipal grid of Kampot. Measure 2 (RE I) extended the Takeo-Kampot line in preparation for rural electrification and created a more efficient supply in the greater Kampot area. Measure 3 (RE II) connected the rural areas with the electricity line. More precisely, measure RE II comprised the extensive development of a 22 kV electricity distribution system with roughly 300 km of lines in the project regions of Takeo, Kampot and Kampong Speu. It is difficult to separate STK and RE I because of the joint measures on the Takeo-Kampot line, their almost concurrent implementation, and RE I's focus on the greater Kampot area, which means both measures are evaluated and rated together. RE II is evaluated separately.

# Relevance

Before the measure was implemented, electricity from the interconnected grid was only available in the district of Kampong Trach, part of Kampot province. Electricity in the city of Kampot was produced by four diesel generators with an installed generation capacity of 1.9 MW. The grid was heavily disrupted with losses of 45 percent, and supplied roughly 59 percent of all consumers with electricity. However, major consumers like hotels had their own diesel generators, and were not connected to the grid. Rural areas primarily had stand-alone grids, which were fed by small diesel generators. With the exception of Kampot, these grids were operated by Rural Energy Enterprises (REE), which did not have sufficient funds to increase the generation capacities at that time. Many households not connected to these mini-grids relied on batteries and charging stations to secure their electricity. The high costs and poor quality of this power supply were identified as potential obstacles to growth for the Cambodian economy.

Having a sustainable, reliable and cost-effective electricity supply is an important prerequisite for the positive economic and social development of a country.1 The results chain for all measures was similar: the improved access to electricity was expected to have positive effects on productivity in industry, agriculture and in the services sector, via the operation of electric machinery for example. In the long run the increased productivity would create new jobs and lead to higher incomes. The costs of electricity were also anticipated to fall in the short term.<sup>2</sup> This was to result in tangible relief for poorer households in particular because their share of expenditure on energy is generally the highest. Thus all measures were expected to fight poverty with positive impacts on income (MDG 1). In rural areas in particular, access to electricity could prevent potential rural depopulation, which was one of the explicit goals of measure RE II. Furthermore, being connected to the electricity grid in rural regions especially, and thus under the scope of measure RE II, was to result in lower use and eventually the abandonment of batteries and diesel generators. The ultimate goal of measures STK, RE I and RE II was therefore to contribute to social and ecological sustainability (MDG 7). The results chain is plausible for the STK and RE I measures and for the direct effects on alleviating poverty. Indirect effects, such as creating jobs, etc., appear possible, but are difficult to measure. Preventing rural depopulation seems less plausible for measure RE II because such an effect could at most be achieved indirectly via improved economic conditions in rural areas.

The high relevance of the measures is partly derived from the low electrification rate in Cambodia and the potentially high demand for electricity from households and businesses as a result. Furthermore, rising population figures suggest there could be an additional increase in demand. On the other hand, there were high synergy effects with projects run by the Asian Development Bank (ADB) and the World Bank. Both donors financed other parts of the grid. For example, the ADB promised a high-voltage line from the coal-fired power plant in Sihanoukville to Kampot, a further line connecting Takeo with Phnom Penh, and the development of municipal lines in Kampot. The FC-financed line was designed to finally connect Takeo with the capital city of Phnom Penh. So given the upgraded purpose of the line and the increased quantity of electricity to flow through it, the dimensions were raised after the project appraisal and a new location was chosen. At that time, Cambodia was a partner country of German DC and the implemented FC measures were in accordance with the sector strategy of the Federal Ministry for Economic Cooperation and Development (BMZ). Helping the rural population by ensuring better access to energy was a key objective in line with the priority area strategy paper from 2006, and it remains so today.

The Cambodian government also made improving the supply of electricity one of its main priorities, especially in rural areas. This is demonstrated not least by the high counterpart contribution of EUR 7.9 million for the 3 measures of STK (EUR 5.2 million) as well as RE I & RE II (EUR 2.73 million). Parallel to this, the government adopted its rural development strategy in 2007. The strategy focused on an extensive expansion of the transmission and distribution grid. Specifically, the plan envisaged that: i) all villages in the country would have access to electricity by 2020, and ii) at least 70 percent of households in rural areas would have access to mains electricity by 2030. Access to high-quality and cost-effective electric power is still an important topic in Cambodia. The existing National Strategic Development Plan (NSDP), which was in force from 2014 to 2018, highlighted infrastructure development as a cornerstone for an efficient economy and broad-based growth in Cambodia.

#### Relevance rating: 1 (STK, RE I), 2 (RE II)

#### Effectiveness

The objective (Outcome) of the FC measures STK and RE I was to create a cost-effective and reliable supply of electricity in line with demand in the greater area of Kampot by expanding the interconnected grid. The FC measure RE II focused on expanding the grid in the rural part of the catchment area for the Takeo-Kampot transmission line. The operationalised indicators are evaluated as follows:

<sup>&</sup>lt;sup>1</sup> Sustainable Development Goal No. 9, which promotes access to affordable, reliable, sustainable and modern energy for all by 2030, is derived from this.

<sup>&</sup>lt;sup>2</sup> See, for example, Bacon, R.; Bhattacharya, S.; and Kojima, M. 2010. Expenditure of Low-Income Households on Energy: Evidence from Africa and Asia. Extractive Industries for Development Series; No. 16. World Bank, Washington, DC regarding the role of energy expenditure for poor households.

**Indicator 1:** The original Indicator 1 envisaged 11 GWh of electricity being transmitted via the line. This indicator was exceeded several times over (3,387 GWh in 2017) and is therefore not suitable for comparing the initial figure with the electricity supply at the time of the evaluation. The reason for the high utilisation is primarily the conveyance of electricity from the Kamchay hydropower plant and the Sihanoukville coal-fired power plant. The electricity from both power plants is fed into the line via the substation in Kampot, and is transmitted to Phnom Penh via Takeo. The fact that the transmission line can be used to connect the Sihanoukville line to Phnom Penh is positive. A direct line linking Sihanoukville with Phnom Penh is currently under construction. So in the near future, the FC-financed transmission line will be used mainly, and as originally planned, to supply Kampot and the rural regions.

**Indicator 2:** In the fourth year after completion of the transmission line, the peak load in Kampot was to exceed 2.5 MW, and it was raised to 3.5 MW in 2006. The indicator was also easily exceeded, reaching 41.7 MW in 2017. From today's perspective, this indicator should have been adjusted during the implementation. Nonetheless, the high target achievement is a very good sign of successful and sensible implementation.

**Indicator 3 and Indicator 4:** Four years after the commissioning of the distribution systems, tariffs were to be lowered by at least 25% in rural areas. Moreover, the planned tariff reduction in the city of Kampot one year after commissioning was 20%. This reduction was to be achieved by displacing the more expensive diesel generators. Both indicators can be deemed fulfilled. Before the FC measures were implemented, the households paid a tariff for electricity amounting to roughly KHR 3,200 (about EUR 0.7) per kWH. At the time of the evaluation, the tariffs sat at between KHR 480 and 770 (between EUR 0.1 and EUR 0.16) per kWh. Since 2012 the Electricity Authority of Cambodia (EAC) has set staggered tariffs for electricity customers based on consumption. This means the tariffs for Kampot are the same as for the rural region, but poorer households can pay the reduced tariff of KHR 480.

**Indicator 5:** The quantity of electricity transmitted every year via the 22 kV lines to the rural regions was to total 20 GWh upon commissioning. EdC was unable to provide any up-to-date figures during the evaluation. Yet at the time of the final review (2015) the figure was already 43.5 GWh and it is assumed that this number has risen further. Partly because of the good economic development in the rural regions, electricity consumption evolved much better than planned, thereby emphasising the need for the 22 kV distribution grid that was constructed.

**Indicator 6:** After the measures are completed there should be no load shedding due to poor energy availability. This indicator is also fulfilled. According to information from EdC, there was no load shedding in either 2017 or in the period from January 2018 to May 2018. Drops in voltage also seem unlikely given the current level of technology. The supply of electricity is now more reliable following the connection to the national interconnected and medium-voltage grid that is more stable. Although there was no load shedding in 2017, a survey conducted by the World Bank for the same period came to the conclusion that there was an average of 1.73 outages per month in the project region. Fifty percent of those surveyed saw no change in the number of outages compared to previous years, while 11 percent thought there had been a rise and 39 percent believed the number had fallen. One possible explanation for this could be weaknesses with the REEs, which transport the electricity to ultimate consumers in the rural areas.

**Indicator 7:** The availability of the system was to be higher than 95 percent. According to EdC, there is no data on the availability of the system. Based on discussions with electricity consumers and operators, however, we assume that the system for private households and businesses has a very high availability of much more than 95%. This is backed by data captured by the World Bank. According to a World Bank survey in 2017, some 93 percent of households in the project region are connected to the power grid, compared with 72 percent throughout Cambodia as a whole. Only 7 percent of the unconnected households in the project region specify the unavailability of the grid as the reason (47 percent throughout Cambodia). This indicator is therefore also met.

**Indicators 8 and 9:** Both the increase in the rural electrification rate and the connection of additional households are parts of the RE II measure with both indicators surpassing the initial goal. The target of "doubling the electrification rate of 2 percent in the year of the project appraisal" was massively exceeded. During the EPE, between 80 and 90 percent of households were electrified. The objective of "connecting 5,000 additional households" was also overachieved by the measure. The implementing agency estimates that roughly 65,000 households in the project region have profited directly from the measure. The attainment of the objectives defined at the project appraisal can be summarised as follows:

Indicator	PA target va- lue	Ex post evaluation
(1) Conveyance of electricity via the fi- nanced transmission line	At least 11 GWh	3,387 GWh (2017)
(2) Peak load in Kampot in the fourth year after completion of the transmission line	At least 3.6 MW	41.7 MW (2017)
(3) Tariff reduction in the rural region 4 years after commissioning of the distribution system	Reduction by 25%	80% (2018)
(4) Tariff reduction in Kampot 1 year af- ter commissioning of the distribution systems	Reduction by 20%	Tariffs staggered based on consump- tion since 2012. The tariffs for Kampot are the same as those for the rural region (see Indicator 3).
(5) Amount of electricity transmitted an- nually via the 22 kV lines	At least 20 GWh	43.5 (2015)
(6) No load shedding due to poor energy availability	0	0 (2017, 2018)
(7) System availability at least 95%	At least 95%	According to EdC, no data on this is available. Based on discussions with electricity consumers and operators, we assume that the system has a very high availability of much more than 95%.
(8) The rural electrification rate in the province of Kampot has doubled	2–2.2% electri- fication rate (% of households)	The implementing agency stated that the electrification rate was between 80 and 90%.
(9) At least 5,000 additional households have gained access to the grid in the rural project area	Roughly 4,800 (number of households)	We estimate that around 65,000 households in the project region ben- efit directly from the FC measure.

Note: Indicators 1 and 2 are part of the STK and RE I measures. Indicators 3 and 4 are part of the RE I measure, while Indicators 5, 6, 7, 8 and 9 are part of the RE II measure.

All of the targets described in the project appraisal were more than fulfilled and, based on the given indicators, all three of the measures can be deemed highly effective. However, from today's perspective, the selection and formulation of the indicators are deemed to be only partially adequate in terms of measuring the effectiveness of the measures. The target values for indicators 1 and 2 in particular are questionable, also given that part of the reason for constructing the Takeo-Kampot transmission line was to carry electricity from Sihanoukville to Phnom Penh. Furthermore, the implementing agency made it clear in discussions held locally that some of the indicators's wording was not comprehensible, and it was not clarified what data was needed for the monitoring.

Effectiveness rating: 1 (STK, RE I), 1 (RE II)

# Efficiency

The Takeo-Kampot transmission line was commissioned along with the substation in Kampot and the rural medium-voltage grids, which facilitated a more reliable supply in the project region (Takeo, Kampot and Kampong Speu). So, we believe the aim of a more efficient electricity supply is achieved insofar as the power supply in the project region is more sustainable and cost-effective. Diesel power plants previously operated in Kampot along with stand-alone grids powered by diesel in the rural regions are now only used as back-ups in the event of outages. The expansion was welcomed on all sides. From our discussions held during the evaluation with EdC, REF and REE representatives as well as with rural dwellers, it became clear that all of the stakeholders were in favour of the further grid expansion, deemed it beneficial, and therefore supported it.

The overall costs of the measures totalled EUR 30.01 million, of which EUR 22.17 million was a grant for the Cambodian implementing agency. The costs of the STK and RE I measures are also considered reasonable by international comparison. Throughout the majority of the country and the project region, expanding the grid is the measure that is most sustainable, most effective and makes the most sense for giving the population access to a more reliable supply of electricity.

It is difficult to make a precise estimate of the production efficiency for measure RE II. One alternative option to electrify areas that are more thinly populated could be to construct mini-grids, which in principle are more cost-effective than constructing a proper grid.<sup>3</sup> However, they are also more susceptible to errors and lower voltage, which is why grid expansion is deemed sensible here.

While EdC also distributes the electricity in urban areas, REEs4 intervene for the rural areas. In the connected areas these function merely as intermediaries, which no longer generate electricity themselves but procure it from EdC. In rural areas they are partly responsible for the expansion of the 0.4 kV grids to which end consumers are connected. For this purpose they are supported by EdC via the Rural Electrification Fund (REF). This integrates private operators into the supply of electricity for the rural areas. However, a lack of information means we are unable to estimate the macroeconomic efficiency of involving the REEs in the rural areas.

EdC generally breaks even, and in 2016 it even generated a surplus. This surplus enables it to crosssubsidise the comparatively low electricity prices in the rural areas. This means the allocation efficiency is high after the completion of the STK and RE I measures, while the allocation efficiency in RE II could be lower because of the cross-subsidisation of tariffs, since the lower tariffs are an incentive for excessive consumption. That said, subsidising may be justified here given the greater poverty in rural areas.

During the implementation of the STK, RE I and RE II measures, however, there was an overall delay of around four years. This kind of delay is significant. Among other things, the delays are attributable to changing circumstances<sup>5</sup> compared to the assumptions made during the appraisal, as well as to laborious procedures within Cambodian public administration and a time-consuming tendering process.

A resettlement and compensation plan was developed in cooperation with the World Bank and the African Development Bank, which EdC had to adhere to. Fourteen households had to be resettled in the context of the measures. The households affected were compensated in accordance with the agreed resettlement and compensation plan, and according to the implementing agency there were no problems.

## Efficiency rating: 2 (STK, RE I), 3 (RE II)

#### Impact

The overarching development objective (Impact) for all three FC measures in the sub-sector of rural electrification was defined as follows as part of the programme proposal for the FC measures: the alleviation

<sup>&</sup>lt;sup>3</sup> World Bank (2007). Technical and Economic Assessment of Off-grid, Mini-grid and Grid Electrification Technologies, Energy Sector Management Assistance Program (ESMAP) The World Bank Group: Washington, DC.

<sup>&</sup>lt;sup>4</sup> In the future the REEs should continue expanding the existing distribution grids and push forward with connecting households in current supply areas.

<sup>&</sup>lt;sup>5</sup> There was massive economic growth and thus greater demand for electricity when the measures were carried out. This produced deviations in significant planning criteria such as choice of location and size of facility.

of poverty (MDG 1) and a substantial improvement in living standards of the population by improving social and ecological sustainability (MDG 7). Measure RE II was also designed to counter rural depopulation.

More specifically, it was assumed that the population would benefit three-fold from the measures: i) households would receive a higher quality of energy service; ii) electricity tariffs would fall, leaving more disposable income; iii) diesel generators would barely be used anymore, triggering a sharp decrease in the associated environmental pollution. In the rural areas, this improvement in living standards was intended to prevent rural depopulation.

The overarching indicators are rather long-term in nature, while the overarching developmental impacts cannot be assessed as yet or no causal link to the evaluated measures can be clearly identified. However, a rough estimate of the effects can be made based on the data available.

#### **Reduction of poverty:**

The national poverty rate in the whole of Cambodia fell during the time of the measures from 45 percent in 2006 to 18 percent in 2016. Yet, it is difficult to identify a precise link with the measures because the Cambodian economy grew by around 7 percent every year between 2006 and 2016. It is generally difficult to determine the influence electricity has on economic growth and on labour and incomes, and it depends heavily on the context.<sup>6</sup> However, it is possible to look at the costs of electricity relative to household costs in order to define the projects's potential influence on poverty. In 2017, electricity costs accounted for 3.3 percent of all household costs in the project region, compared with 5.2 percent for Cambodia as a whole. During recent years, zero percent of the households in the project region reported an increase in the electricity price (5 percent for the whole of Cambodia), while 65 percent reported a lower price (51 percent for the entire country). This suggests a relatively positive development in the influence of electricity prices on household costs, and therefore a reduction in poverty in the project region when compared to other households in Cambodia as well.

#### Improved social and ecological sustainability:

The diesel power plants in Kampot and in rural areas were switched off, and are now only used as a backup. It can be assumed that the use of batteries in rural areas was reduced parallel to this, and the associated question of ecological sustainability can be answered positively.<sup>7</sup> The electricity now used is drawn from a coal-fired power plant and a hydropower plant, which makes it very difficult to estimate the CO<sub>2</sub> effects. Nonetheless, all three measures display positive social and environmental sustainability.

#### Preventing rural depopulation:

Preventing rural depopulation is specified as an objective in measure RE II. Electrification in itself has so far not been a factor in preventing migration, and it also seems unlikely that migration flows will stop because of this to any significant degree. The impacts will be indirect at best, through better working opportunities for example. Nonetheless, it is a factor for inhabitants of other rural areas. In the local surveys the inhabitants made it very clear that they had made a conscious decision to move to the project region because of the reliable availability of electricity combined with more favourable land prices (compared to urban regions).

Given the largely positive impacts of the measure on reducing poverty as well as the social and ecological sustainability, the STK and RE I measures are rated as very good. Measure RE II is rated as good, marked down slightly with regard to preventing rural depopulation.

# Impact rating: 1 (STK, RE I), 2 (RE II)

<sup>&</sup>lt;sup>6</sup> Grimm, M.; Lutz, E.; Mayer, M. and Paffhausen, A.L. (2014). Employment Effects of Road Construction and Access-To-Energy Interventions – Evidence from a review of the literature, KfW-Research, Studies and Proceedings, KfW Group: Frankfurt am Main.

<sup>&</sup>lt;sup>7</sup> On the issue of batteries, also see: Bensch, G.; Peters, J.; and Sievert, M. 2017. The lighting transition in rural Africa — From kerosene to battery-powered LED and the emerging disposal problem. Energy for Sustainable Development 39 : 13-20.

# Sustainability

The FC measures have made a significant contribution to the sustainable development of national electricity infrastructure and thus to the access of the (rural) population to electrical power.

Parts of the 230 kV transmission line were visited during the evaluation mission, focusing in particular on both ends and the substation. Two masts were also chosen at random and checked for their current condition (foundation, protection, steel bars, etc.). Nothing unusual was noted and they were found to be in a very good condition.

The substation in Kampot was inspected in detail and found to be in a very good condition. It was determined that the transformer was operating at a higher capacity. This was deemed positive as it is a sign of the growing energy supply in the region. During the mission, the team drove along some long sections of the 22 kV transmission line that run parallel to the road. They were seen to be in a good condition. All of the components financed as part of the FC measures were fully functional and in a very good condition.

EdC maintains both the substation and the components in a professional and very committed manner. At the same time, the implementing agency is taking the lead with expanding grid infrastructure in Cambodia. The company has a settled balance sheet and in 2016 generated a surplus of roughly EUR 93 million. The financial stability of EdC provides a good foundation for the necessary and sustainable development of the electricity sector.

Based on the findings presented here, the stable position of EdC and taking into account the government's keen interest in continuing with electrifying the country, it is assumed that both the financed measures and the positive developmental effects will be fully sustained even after the completion of the FC measures.

The sustainability of the FC measures is consequently rated as very good overall.

Sustainability rating: 1 (STK, RE I), 1 (RE II)

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

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

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

Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

#### Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a "successful" project while rating levels 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (level 3).