

Egypt: Construction of Primary Schools III

Ex-post evaluation

OECD sector	11220 – Primary school education	
BMZ project ID	1997 65 769	
Project-executing agency	General Authority for Educational Buildings (GAEB)	
Consultant	Dorsch Consult, Munich	
Year of ex-post evaluation	2005	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	Q 3 1998	Q 3 1998
Period of implementation	36 months	52 months
Investment costs	EUR 19.6 million	EUR 19.1 million
Counterpart contribution	EUR 2.2 million	EUR 1.7 million
Financing, of which Financial Cooperation (FC) funds	EUR 17.4 million	EUR 17.4 million
Other institutions/donors involved	none	none
Performance rating	2	
• Significance / relevance	3	
• Effectiveness	2	
• Efficiency	2	

Brief Description, Overall Objective and Programme Objectives with Indicators

The project “Primary School Construction - Phase III” was designed as an open programme and complements the FC project “Construction of Primary Schools - Phases I and II” (1994 66 301) in the governorates of Beheira in the Nile Delta and Qena in Upper Egypt and also in the governorate of Fayoum. All three phases are part of a series of projects called “Primary School Construction Programme (PSCP)”, five phases of which have already been implemented. The objective is to further improve the supply with classrooms through the new construction, complete or partial replacement, expansion or rehabilitation of primary schools, the equipment of the programme schools with the required furnishings and through a fund for the degressive financing of the ongoing maintenance of the buildings. 88 individual projects were implemented under the measure, which helped to newly build or rehabilitate 1,051 classrooms for primary school and pre-school children and, thus, to provide approximately 42,000 additional or rehabilitated school places.

The purpose of the programme is to contribute to improving elementary education (overall objective). At the time of the project appraisal the programme objectives were defined as an increase in school enrollment rates for pre-school and primary school children and an increase in teaching efficiency. However, school enrollment rates at the regional level are not suited to measure the achievement of the programme objective but the achievement of the overall objective. Thus, the following indicators were defined to measure whether the objectives have been achieved in the three governorates included in the programme:

Indicators to measure the achievement of the overall objective

- The gross enrollment rate of girls is at least 65% and that of boys at least 75%.
- Repeat and dropout rates (increase in the number of successful primary school leavers) - no quantitative indicator was defined here.

Indicators for the achievement of the programme objectives:

- Local school enrollment rates: As the available statistical data on school enrollment rates at the municipal level is not very reliable, the enrollment rates in the catchment area of the programme schools were added for reference purposes after the evaluation conducted by the BMZ in 2001.
- A class size of not more than 40 children in at least 80% of classrooms financed,
- 0.75 m² of space available per pupil and
- in at least 80% of the programme schools classes are held in single shifts.

(No specific indicators were defined for the aspects of efficiency and for pre-schools.)

The project was designed as a contribution to Egyptian school reform and to complement other donors' programmes, above all the Enhanced Education Program of the EU/World Bank, which also implements school construction on a larger scale itself. The project-executing agency of the PSCP is the General Authority for Educational Buildings (GAEB), which is part of the Ministry of Education.

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

At the time of project appraisal the basic education system in Egypt (compulsory education) comprised 8 school years and was expanded in 2004 to comprise 9 years of compulsory attendance. The FC project PSCP was aimed at improving the primary school infrastructure, which comprised 5 grades at the time of the project appraisal and 6 grades as from 2004. The creation of a pre-school infrastructure at the newly-built primary schools was to improve the learning conditions at the primary schools for those boys and girls who had hitherto been disadvantaged.

Like the governorates of Quena and Beheira before, which had been selected during the earlier phases I/II, the governorate of Fayoum was additionally selected for the third phase because of its particularly weak socio-economic situation. All three governorates are situated in mainly agricultural regions and, at the time of the project appraisal, had an above-average proportion of poor urban and rural households and illiterate people. The school enrollment rates for both boys and girls were noticeably below the national average. In the national Human Development Index (UNDP) the three governorates continue to be ranked in the lower third.

The planning of the school sites in the Governorates was supported – in agreement with the school requirements planning - by a geographical information system (GIS), which shows the population density and, thus, facilitates the definition of priorities for the selection of programme schools. At the selected programme schools a decentralized system was introduced for the maintenance the school buildings (DMS), which is being financed from FC funds and funds provided by the Egyptian Ministry of Education and implemented by GAEB. The gradual change in the financing shares (1st year: FC 70%, GAEB 30%, 2nd year: FC 30%, GAEB 70%, as from the 3rd year: GAEB 100%), which was envisaged at the time of the project appraisal, was followed up to now. However, the individual stages (drawing up the budget; instruction to disburse the money to the schools) are still being accompanied in the context of follow-up phases of the PSCP.

The total costs of phase III amounted to EUR 19.1 million (calculation at project appraisal: EUR 19.5 million). As explained during the final inspection, this good result is due to the well-adapted design and good cost monitoring. Of the total cost, EUR 17.38 million was financed from FC funds. In random samples we have not found any indications of improper use of the funds.

Due to the increase in the density of the school network, the reduction in the number of pupils per classroom and the new construction and rehabilitation of classrooms the programme measures contributed to improving the educational offer and the learning conditions as well as facilitating the access to primary education. 88 school construction projects were implemented (planned: 70) comprising 1,051 classes and 83 kindergarten classes (planned: 840):

1. As had been planned, 28 new schools were built at new sites with altogether 306 classrooms (78 in Beheira, 132 in Qena and 96 in Fayoum) and 51 pre-school classes.
2. 16 (instead of 14 planned) new buildings were constructed to replace existing school buildings, which were no longer suitable for use. Altogether 192 classroom (36 in Beheira, 72 in Qena and 84 in Fayoum) and 32 pre-school classes were created.
3. 15 instead of 14 buildings to replace part of the existing schools with altogether 165 classrooms (67 in Beheira, 76 in Qena and 84 in Fayoum);
4. 6 expansion buildings with 64 classrooms, all in Beheira;
5. 23 (instead of 14 originally planned) building rehabilitations of existing school buildings with altogether 241 classrooms (113 in Beheira, 77 in Qena and 51 in Fayoum);

Other substantial deviations from the original project planning did not occur. In general we consider the project's conception as adequate.

Key Results of the Impact Analysis and Performance Rating

The measures implemented in Phase III covered altogether 88 primary schools. 38,720 primary school pupils and 3,320 pre-school children benefited from the measures. This was approximately 2,000 more children than calculated at project appraisal. Through the provision of additional classrooms a contribution was made to reducing the illiteracy rate. The reduction achieved was more substantial than planned at project appraisal. Shorter distances to school have a positive impact especially on school enrollment rates and school attendance periods of girls. At many programme schools the share of girls increased more strongly than expected. This is due on the one hand to better access to schools, but also to the general trend towards education for girls and especially also to a simple statistical effect: The educational offers of private religious-oriented Al-Azhar schools¹ increased substantially in the programme region. These schools are mainly attended by boys and in consequence the percentage share of girls at the state schools increases since the Al-Azhar schools are not included in the official statistics. All programme schools were equipped with the necessary furnishings and were given access to decentralised funds co-financed with FC funds and created for the purpose of school maintenance (DMS).

As was already the case at the time of the appraisal of the "Primary School Construction Programme (PSCP)", the teaching and learning success at the programme schools is negatively affected by low teacher salaries, the low qualification of teachers and the often inadequate infrastructure. For this reason additional private lessons, which have to be paid for, however, are offered at many schools in the afternoon. Many parents pay for such lessons because they do not want to jeopardize the occupational chances of their children in later life, even though the

¹ The Al-Azhar schools, which, besides teaching the usual subjects, put a strong emphasis on Islamic religion, are supervised by the Supreme Council of the Al-Azhar educational institutions. They operate independently of the public education system. They consist of a six-year primary level, a three-year intermediate level and a four-year secondary level and, after graduation, pupils receive a school leaving certificate which allows them to take up studies at the Al-Azhar Universities.

costs often place a heavy burden on the family income and the principle of free primary education is undermined. In addition, many families have to pay for learning materials and for school uniforms, and opportunity costs for older children (mainly boys) are also increasing (e.g. help in the household or in agriculture). There have been attempts to offer free private lessons in the afternoon, but these efforts do not seem to have any positive effects (just like the ban on paid private lessons) because teachers very much depend on this additional income financed by the parents due to their low pay, which is not likely to be increased in the foreseeable future owing to current budget situation.

In the last few years massive campaigns were conducted to achieve the school enrollment of all children and to reduce dropout rates. As a result most pupils do not only attend school today but also stay on at school until they have completed the nine years of compulsory education. Given the successful efforts of the Egyptian state and its partners to achieve the objective of "Education for All", the next challenge to be tackled is to improve the quality of teaching and lessons. As in the past teaching at the schools is conducted in the traditional manner, which is little suited to prepare children for the future in a knowledge-based society. Many teachers are not able to cope with the changes in curricula. With donor support several pilot projects were carried out in the last few years, which were integrated into the "Effective School" Programme at the end of 2004. The pilot projects aim at improving learning achievements through better teacher training and the formulation of curricula standards. In addition, the local authorities are to be given more responsibility for the schools and, thus, to contribute to improving school management. Different school models help to cope with the specific demand also in areas with a lower population density and with regard to disadvantaged children, especially girls. Due to the continued high population growth further comprehensive school construction measures are required. In the future, too, the Egyptian state will depend on support from different donors to accomplish this task. However, the "Effective School" Programme will only be successful if there is the political will to consequently decentralise responsibility in the field of education.

In the last few years there have been frequent discussions on the insufficient cooperation between the Egyptian Ministry of Education and the different donor organisations active in the education sector. However, for a long time no real coordination and joint strategies were developed. The "Education Enhancement Program" financed by the EU and the World Bank was alleged of having developed relatively independent parallel structures and for this reason was to be placed directly under the responsibility of the Under-Secretary of State in the Ministry of Education. In connection with the "Effective School" reform programme the Ministry of Education is now trying to establish joint control bodies. But some donors, for instance USAID, still do not show much interest or willingness to be integrated in a joint programme under the leadership of the Ministry of Education. The EU and the World Bank will continue to implement construction measures, but in the future they will also increasingly focus on improving the quality of the educational offer. Since the FC project is implemented together with the GAEB Authority for Educational Building and has so far not been represented in the steering committees of the Ministry of Education, the coordination and cooperation with other donors (also regarding cooperation in the programme governorates) is possible only to a very limited extent. As a result the attention paid in the MoE to the PSCP project is also very limited. Nevertheless, in the last few years KfW has participated regularly in the "education sub-group" held by the donors.

In the third phase, too – as in the phases I and II before (compare final evaluation report dated March 22, 2004) – the programme objectives were exceeded:

- The utilisation rate of the classrooms in the programme schools is good (see below). As was proposed during the BMZ evaluation, school enrollment data have up to now not been collected in the local catchment areas of the schools. To collect such data would have required great efforts, but is to be carried out during the phases still to come. The

development of gross enrollment rates in the governorates, however, is positive overall (both in absolute figures and with regard to girls) and will be described in more detail below.

- There was no significant change with regard to the double shift teaching. By the time the final follow-up was conducted the double shift system had been abolished in two cases and newly introduced in three cases. Thus, the requirement that not more than 20% of the programme schools must operate in two shifts has been fulfilled. (However, the informative value of these figures is little meaningful in the programme context. Of the 34,080 primary schools that exist in the country as a whole, 580 are operated in two shifts and 1,455 are used by two school communities.)
- The envisaged number of pupils, which also serves as an orientation for the FC project, is 40 children per classroom. Officially, classrooms with 55 pupils or more are defined as overcrowded. While the national average in 2003/2004 was 42.5 pupils per class, the figure at the programme schools was 44 pupils per class on average. It is difficult to establish correct figures due to the fact that at some schools not all rooms are used as classrooms but are temporarily not in use due to lack of demand or are changed to serve as special-purpose or administrative rooms. However, the situation is improving constantly due to the additional 6th primary school year which was introduced recently. According to the figures collected the floor space per pupil in the programme schools is approximately 1 m². The objective was at least 0.75 m² per pupil.

The acceptance of pre-school classes, the attendance of which has hitherto been voluntary, has increased in the last few years. Still, in the period 200/2001 only about 12 % of children were enrolled. In the towns most pre-schools that have adequate buildings and rooms are privately owned and run and, thus, are relatively expensive. In rural areas most people do not acknowledge the necessity that attending pre-school is important. Even at the programme schools, which do not charge fees for pre-school classes, class size is mostly very small. In consequence, vacant pre-school rooms are frequently used for primary-school classes (recommendation made in the final follow-up report).

In terms of quantity, the contribution of the project to the overall objective of improving primary education has been fulfilled. According to statistics provided by the Ministry of Education for the year 2004, the gross enrollment rate for boys/girls is 93.6% and 95.3, respectively, in Beheira, 88.4% and 87% in Qena and 82.8% and 92.6% in Fayoum.² However, these figures cannot be compared with the figures (65% for girls, and 75% for boys) defined as indicator because the latter are based on region-specific data collected by the consultant, which were clearly below the official values at the time of the project appraisal. It would have cost a lot of time and effort to repeat the collection of these data. Still, on the basis of a representative sample made at the schools in the programme governorates it became evident that the gross enrollment rate between 1998/1999 and 2001/2002 increased by 5.9%. The school enrollment rate for girls increased at an above-average rate (7.2%). This high increase is due to the fact that in some catchment areas the enrolment rates for girls had been extremely low but also to the fact that in the vicinity of the programme schools an increasing number of boys enrolls with the Al-Azhar schools, which account for about 10% of total school enrollments. Overall, we rate the development of gross enrollment rates in the three programme governorates as positive, and this is also largely due to the contribution made by the FC programme. Due to the additional and improved schools and classrooms (new, expanded and rehabilitated schools) the project contributes to the qualitative improvement in the primary school area. The indicators to support this are the reduction in the repeat rate at the primary schools from 7% at project appraisal to recently 0.8%. As a result the number of successful primary school leavers is also rising. These positive developments are also due to a targeted campaign conducted by the Egyptian government in the last few years. In summary, one can say that the project supported the

² The corresponding national average for 2004 is 94.9% for girls and 97.9 for boys.

Egyptian school policy. Nevertheless, it is not possible to furnish proof of any direct qualitative impact of the FC programme measures.

The objective of the fund for the decentralized maintenance of the schools (DMS), which is jointly financed by GAEB and FC, is to ensure the sustainability of the construction and rehabilitation measures. According to information provided by the consultant in Egypt, the financial resources available to the project schools are sufficient, since GAEB also pays its share. The school headmasters are responsible for the request and use of funds and as a result the situation at the schools is more or less satisfactory. But as in the case of other aspects of school management, the dedication and commitment of the individual headmasters is the crucial factor. In comparison with other schools, the maintenance of the PSCP schools is better. Unfortunately, GAEB and other donors have not generally applied this type of financing to other schools because the state is lacking the necessary funds. In consequence, once the PSCP project has been terminated the decentralised maintenance system (DMS) will not be continued by GAEB and the MoE. A sustainable system to ensure the proper maintenance of the schools can only be established in coordination with the Ministry of Education and the other donors and will only succeed if the participation and the responsibility of the local population is increased.

In line with the project objectives, the programme governorates and the school sites were selected in a way to ensure that the main beneficiaries of the project were children from poor families. Thus, the FC project contributed to direct poverty reduction. The programme is intended to have a positive impact on the enrollment rates of girls, for instance by reducing the distance children have to walk to school. Actually, the enrollment rates of girls increased disproportionately. The project did not focus on improvement in the area of participation/good governance. Neither the construction measures nor the newly built sanitary facilities had been expected to have any specific environmental impacts. Special environmental measures were not required.

The summarized assessment of the developmental effectiveness of the project is based on the following key criteria:

- We judge its effectiveness to be satisfactory (rating 2). In terms of quantity the programme indicators were exceeded substantially in some cases. Only the indicator 'number of pupils per classroom' was reached by a narrow margin. The good enrollment rates were intensified by general and country-wide trends, but also by the strategies and measures pursued in the education policy in Egypt, and supported by a number of international donors. The decentralized maintenance funds, which was developed by FC, remained limited to the programme schools and will presumably not have a lasting and sustainable effect.
- In view of the scope and quality of the school places created, the programme's efficiency is deemed to be satisfactory (rating 2). Due to the development of exchange rates and generally favourable offer prices, it was possible to exceed the estimated number of school construction measures by 26% and the number of classrooms by 7%. However, considerable delays occurred during the implementation of the programme (mainly difficulties with the identification of sites and plots and the tendering procedure).
- The overall objective to contribute to improving the primary education was mainly reached in terms of quantity (more school places for girls and boys, shorter distances to school, better sanitary facilities). The assumption that cooperation with other donors and synergy effects would be generated at the regional level did not come true. Such types of cooperation have only come into existence recently and depend on the willingness and openness of the Ministry of Education as much as on the donors active in the sector (e.g. local support for girls' enrollment and advanced teacher training). However, qualitative changes can be noticed at the national level (reduction in the repeat and dropout rates). The geographical information system (GIS), which was introduced at GAEB with the support of FC, has been accepted in the meantime, even though no satisfactory continuous link has been established so far between the data provided by the GIS and the school mapping

prepared in the Ministry of Education. Due to the low qualitative impacts of the programme and the unsatisfactory linking with other projects in the education sector we rate the significance/ relevance of the project as adequate (rating 3).

Overall the project “Construction of Primary Schools – Phase III” is judged as having a satisfactory degree of developmental effectiveness (rating 2).

Lessons Learnt

The project was based on the assumption that the school construction and rehabilitation measures financed from FC would tie in with projects implemented by other donors at the same time and contribute to improving the pedagogic competences and pupils’ learning achievements (synergy effects). Experience has shown that this is only possible if the respective project is embedded in sector-relevant structures, which enable a better coordination and cooperation between complementary programmes.

Abbreviations

ECG	Engineering Consultants Group, Cairo
FC	Financial Cooperation
DMS	Decentralized Maintenance System
GAEB	General Authority for Educational Buildings (project-executing agency)
GIS	Geographic Information System
MoE	Ministry of Education
PA	Programme appraisal
PSCP	Primary School Construction Program (FC project)

Legend

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

Criteria for the Evaluation of Project Success

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

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

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