

Ex post evaluation

School Construction in the Gaza Strip, Palestinian territories

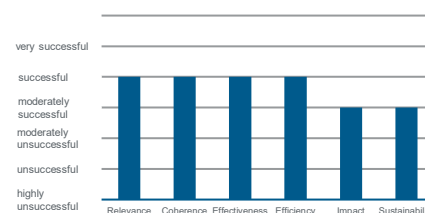


Title	School Construction in the Gaza Strip (Employment Generation Programme VIII)		
Sector and CRS code	Primary education 11220		
Project number	2004 65 229		
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)		
Recipient/project-executing agency	Ministry of Education (MoE)		
Project volume/ Financing instrument	EUR 10 million/BMZ budget funds		
Project duration	October 2004 – November 2017		
Year of report	2021	Year of random sample	2020

Objectives and project outline

The objectives at outcome level were to make appropriate use of the better quality and quantity of school infrastructure and create temporary employment opportunities for poorer residents of the Gaza Strip. At impact level, the objective was to contribute to improving the educational level of the target groups through improved access to better education in qualitative and quantitative terms, and to contribute to stabilising and improving living conditions through better opportunities for economic and political participation. By funding the construction of ten new primary and secondary schools, additional school places were created that benefited girls and boys equally.

Overall rating:
Successful



Key findings

Despite difficult political conditions and a precarious security situation, the goals were mostly achieved; however, the risk to lasting, regular school operation is high. The project was still rated as “successful”.

- The construction of the new schools was relevant due to the shortage of much-needed school places given the high demographic growth, scarce land for construction, lack of funding as well as restrictions imposed by the Israeli administration in the Gaza Strip.
- The relevance rating of good was also given since temporary income was created for the local population – plagued by poverty and unemployment – who were employed in the school buildings.
- The project was coordinated with cross-sectoral projects; it was also coherent with other German DC measures.
- The effectiveness of the project is rated as good, since additional school places were created for 9,200 children in an architectural environment conducive to learning. It was possible to maintain the level of education despite high demographic growth, and the project had a stabilising effect (impact).
- Despite massive restrictions imposed by the Israeli administration, the new schools were built and equipped at a reasonable cost.
- There is a risk to sustainability, as operating costs and reinvestment for the schools are unlikely to be adequately guaranteed in the long term if conflicts persist and there is a chronic shortage of funding.

Conclusions

- A better quality and quantity of school infrastructure can create opportunities in a society for which violence and insecurity are experienced daily.
- The employment measures have had a short-term impact on the economic situation; but the high incidence of poverty is still a reality.
- Pupils' academic performance does not just depend on qualitative aspects, such as the teacher-pupil ratio. It is rather the psychological consequences of Israel's blockade of the Gaza Strip that have a negative impact on academic performance.
- Experiences with school construction in the Gaza Strip are transferable to education projects in other conflict regions.

Rating according to DAC criteria

Overall rating: 2

Ratings:

Relevance	2
Coherence	2
Effectiveness	2
Efficiency	2
Impact	3
Sustainability	3

General conditions and classification of the project

The “School Construction in Gaza Strip (Employment Generation Programme VIII)” (BMZ no. 2004 65 229) was implemented from 2004 to 2017 in the part of the Palestinian Territories where Hamas, classified as a radical Islamist group, took power in 2007. Since then, the Gaza Strip has largely been cut off from the outside world by Israel. The granting of work permits outside the Gaza Strip to Palestinian residents is restricted by the Israeli authorities, who must also approve all exports and imports. In the Gaza Strip, which is only about half the size of the city of Hamburg (365 km²), 1.9 million inhabitants live in a very small area, i.e. 5,238 inhabitants/km², more than twice as many as in Hamburg (2,446 inhabitants/km²). The economic stagnation that has persisted for years has led to high unemployment, especially among young people who have no discernible prospects of a better future. With continued high demographic growth of 2.4 % per year, there is a shortage of schools for Gaza’s predominantly young population. The German FC project, which is one of a number of other German DC projects for sustainable economic development and employment promotion in the Palestinian territories, built and equipped 10 new schools under the auspices of the Ministry of Education (MoE - formerly Ministry of Education and Higher Education) of the Palestinian Authority (PA).¹

Breakdown of total costs

		EGP VIII (planned)	EGP VIII (actual)
Investment costs	EUR million	13.50	13.50
Counterpart contribution	EUR million	3.50	3.50
Funding	EUR million	10.00	10.00
of which BMZ budget funds	EUR million	10.00	10.00

Relevance

Access to education is extremely important in Palestine, a society plagued by poverty, unemployment and conflict. However, demographic growth averaging 2.4 % per year, a mostly young population, scarce land for building, lack of funding and restrictions imposed by the Israeli government are just some of the reasons why the need for school places could not be met in recent years by the Palestinian Authority, which has been responsible for managing the Palestinian education system since the Oslo II Accord in 1995.

¹ The 2015 ex post evaluation of Phases VI and VII of the “Employment Generation Programme, School Construction in Gaza Strip” (BMZ no. 2001.6537.3) and in the West Bank (BMZ no. 2002.6538.9) resulted in an overall rating of 2.

In Gaza, around 45 % of primary schools are run by the United Nations Relief and Works Agency for Palestine Refugees² in the Near East (UNRWA) and around 55 % of children attend a UNRWA school, although the proportion of refugee students in schools run by the Palestinian Authority is also 40 %³. Overall, the enrolment rate is high at the primary level, but lower at the secondary level. However, the shortage of school places means that 2/3 of the schools work in double or triple shifts, sometimes with reduced hours per day. According to UNICEF projections, the need for additional schools in 2010/2011 was estimated at over 100 to accommodate the growing number of students in the 1-shift system. The need for new schools and classrooms remains high.

Against this background, German FC also supported the PA in the construction and rehabilitation of schools in the Gaza Strip and the West Bank with the multi-phase project “Employment Generation Programme”. Phase VIII, which is evaluated here, involved the construction of 10 new schools in Gaza. Since Phase VII, qualitative aspects have been given greater consideration in school construction, with the aim of improving the learning environment and atmosphere in the schools. More attention was paid to decisions about location (quiet, clean environment etc.), climate aspects (cross-ventilation, shading, layout, etc.) or the construction of places for social interaction (multi-purpose hall, outdoor facilities, playgrounds, etc.) as well as pupil-friendly classrooms and classrooms for specific subjects. Environmental criteria were also taken into account, such as the use of solar thermal energy or environmentally friendly materials.

In conceptual terms, the temporary creation of jobs in connection with the school construction was also aimed at improving the living conditions of the people in the Gaza Strip. In light of the precarious situation of the inhabitants of the Gaza Strip, job creation as well as the creation of school infrastructure are still relevant, even if the employment effect is only limited and temporary.

Also from today’s perspective, the core problem of precarious living conditions, high unemployment as well as a lack of school infrastructure and quality education was correctly identified. The design of the measures to achieve the objectives at outcome level with the dimensions of education, infrastructure and employment is coherent and appropriate. In the fragile context, more education can also be expected to increase the opportunities for economic and political participation, which contributes to stabilizing and improving living conditions. In addition, providing structure to everyday life through school attendance also potentially lowers the willingness of young people to engage in conflict.

The project’s objectives were also aligned with the goals of the 2030 Agenda, in particular SDG 4 (Education) and SDG 1 (Poverty), as well as the German Federal Government’s development policy goals for the Palestinian territories. The strategic reference document was the Education Development Strategic Plan III (EDSP III) for the period 2014-2019 of the MoE, which – in addition to improving access to a better quantity and quality of education system – was aimed at a results-driven and transparent sector management.

In short, the relevance is rated as good, since the project was aimed at solving core problems in Gaza that are important in terms of development policy, and was in line with the objectives of the PA, the German Federal Government and the international community.

Relevance rating: 2

Coherence

The FC project was closely linked to the donor basket funding implemented in 2010 to support the MoE in implementing the Education Development Strategic Plans. Among other things, planned measures were shifted between the two projects as needed to ensure rapid implementation; in addition, the education

² Descendants of Palestinians who were forced to flee after the state of Israel was founded in 1948 and the Israeli-Arab wars of 1967 and 1973.

³ UNICEF 2018: State of Palestine – Country Report on Out-of-School Children. Accessible online at https://www.unicef.org/oPt/OOSC_SoP_Full_Report_EN.pdf.

basket benefited from the further development of school designs through the FC project "Employment Generation Programme School Construction" Gaza.⁴

The sector-wide approach of donor basket funding has made a significant contribution to donor harmonization, MoE ownership and comprehensive sector and policy dialogue. The FC contributions to the basket funding and to the "Employment Generation Programme VIII School Construction" in Gaza were integrated into a number of other programme measures for sustainable economic development and employment promotion in the Palestinian territories, all of which were intended to help counteract the high unemployment, the poor economic situation and the lack of adequate infrastructure.

However, the Israeli-Palestinian conflict, the rift between the Fatah government in the West Bank and Hamas in the Gaza Strip, different ideas about the Middle East peace plan and the limited sovereignty of the PA make a fundamentally coherent approach in the Palestinian territories difficult. In addition, the de facto Hamas government is increasingly taking over control of the education system, replacing Fatah-affiliated teachers, school administrators and education policymakers with Hamas supporters.

However, a coherent approach was evident especially with regard to the DC measures of the international donor community in the education sector and in the cooperation with the PA. For this reason - despite the limitations mentioned - we still rate the coherence of the project as a good result that meets expectations.

Coherence rating: 2

Effectiveness

The objective of the project at outcome level was to ensure that children of primary and secondary school age make appropriate use of the better quality and quantity of school infrastructure. In addition, temporary employment opportunities were to be created for poorer sections of the population.

In quantitative terms, the construction of the 10 schools financed from FC funds (1 co-educational primary and 9 secondary schools, 5 for girls, 4 for boys) created 9,200 school places in the envisaged 1-shift operation. All schools are operational and the number of pupils has grown from approximately 7,500 to more than 8,500 from the final review (2017) to the time of the EPE (2020), which means that capacity is increasingly being utilized at an average of 94 %; however, class sizes vary greatly by school. Since 2017, another school has also been able to switch from a multi-shift to a 1-shift operation, so that 9 of the 10 schools now only operate in one shift. Boys and girls benefited equally.

The teacher-pupil ratio, which is often used as an indicator of the quality of an education system, averaged 1:24.8 in schools in the 2019/2020 school year - a common figure for Gaza, but high⁵ by international standards, and usually even higher in schools run by UNRWA in Gaza.⁶

The condition of the schools, which affects the learning environment and atmosphere, was rated as very good by the MoE at the time of the EPE. In addition to a low-maintenance design, a maintenance and operating plan based on experience gained in the previous phases is crucial here. This includes, for example, better familiarization of the school management and teaching staff with the possible uses of the schools, or the performance of minor maintenance work by the schools themselves, also involving the parents or the local authorities.

⁴ The education basket addresses formal and non-formal education needs at all levels of the education system that fall under the responsibility of the MoE. Funding is provided for the construction of school infrastructure, complementary infrastructure measures (e.g. furniture) or reform projects (e.g. inclusion measures, digitalisation, training and further education).

⁵ Comparison of OECD countries averaging 1:15 in basic education in 2019, global average at 1:23 according to World Bank 2018 data.

⁶ However, research findings on the extent to which teacher-student ratios negatively affect student performance are inconclusive in international comparisons; <https://www.oecd-ilibrary.org/docserver/eag-2013-26-de.pdf?expires=1606924441&id=id&ac-name=guest&checksum=991F7E2028C2E60FAADB9BB34A3507E5> (01.12.2020). In Gaza specifically, it is evident that the academic performance of pupils attending UNRWA schools is slightly better than that of students at state schools, although at UNRWA schools the teacher-student ratio is usually slightly higher; Abdul-Hamid et al. 2016: Learning in the Face of Adversity. The UNRWA Education Program. Accessible online at <http://documents1.worldbank.org/curated/en/683861468000250621/pdf/100532-PUB-Box393232B-OUO-6-PUBDATE-11-11-15-DOI-10-1596978-1-4648-0706-0-EPI-146480706X.pdf> (01.12.2010)

Indicator	Appraisal 2004	Final review EGP VIII 2018 EPE 2020
(1) Utilization of school capacity (number of pupils/total capacity)	Status: 0 Target: min. 75 %	Final review: Ø 83 % → achieved EPE: Ø 94 % → achieved
(2) Teacher-pupil ratio	Status: Ø 1:29 Target: N/A	Final review: Ø 1:24 EPE: Ø 1:24.8
(3) Percentage of schools in operation in good condition	N/A	Final review: 100 % EPE: 100 %
(4) Employment days created	110,000	Final review/EPE: 107,483 → narrowly missed

Data for EPE according to EPE surveys.

In addition to the quantitative and qualitative goals pursued by the project in the education sector, the other goal was to create 110,000 employment days for poorer sections of the population. This goal was only narrowly missed with 107,843 employment days. Wages accounted for an average of 28% of construction costs; accordingly, one employment day was paid at an average of EUR 21.5, which was well above the average for comparable projects⁷ and roughly equivalent to the minimum wage of around EUR 20. It is impossible to determine the extent to which poorer residents in particular found employment here.

Overall, it was possible to implement a high-quality school building design while at the same time largely meeting quantitative targets. For this reason, we rate the effectiveness of the project as good, in line with expectations.

Effectiveness rating: 2

Efficiency

Compared to the costs of other school buildings in the Palestinian territories, the project's production efficiency is rated as good, as the 10 new schools were built and equipped at a reasonable cost despite massive restrictions imposed by the Israeli administration.

With a total building area of 29,552 m², the construction costs per m² averaged EUR 305, but they varied in a considerable range between EUR 226/m² (secondary school for girls) and EUR 335/m² (secondary school for boys). Despite the additional sanitary facilities required in a co-educational school, the costs for the co-educational primary school fell in the mid-range at EUR 290 per m². When the new construction projects were tendered, one of the restrictive conditions was that construction contracts were only awarded to companies from the Gaza Strip, which tended to limit price competition among bidders. With a bid amount for 10 schools of EUR 8.1 million, for which contracts were awarded, there was a difference of about EUR 160,000 between the most expensive and the cheapest bid; the cheapest bid was EUR 226/m², the most expensive EUR 335/m². Differences in costs per school are not only due to differences

⁷ For example, the project "Poverty Oriented Infrastructure EGP VII" (BMZ no.: 2006 66 461) paid an average daily wage of EUR 15 in the Gaza Strip and EUR 19/day in the West Bank.

in the number of classrooms, but also to differences in the characteristics of the properties and the type of school, although no difference was found between girls' and boys' schools.

The tenders for the construction projects were also subject to the condition that a minimum number of local workers from poorer families be employed in order to generate temporary income; this meant that limits were placed on any cost-reducing mechanization of the construction work.⁸

Due to the political situation, there were considerable delays in the approval of the construction projects by the Israeli administration and the construction of the school buildings, as import permits for building materials were not granted. As a result of the Israeli blockade policy, the implementation period of 13 years was considerably longer than planned at the time of the appraisal (3 years). Despite the significantly longer implementation period (attributable not only to the project executing agency), which increased costs, the production efficiency is rated as good, also taking into account that the schools were based on ambitious architecture to create an environment that is particularly conducive to learning.

Since the Israeli administration refused to use the FC funds to rehabilitate existing schools or for alternative uses in the education sector, the only option was to build new schools. By choosing this option to design the new schools to a high standard of quality at an overall reasonable cost, the allocation efficiency is also rated as good.

Efficiency rating: 2

Impact

The objective of the project at impact level was to contribute to improving the educational level of the target groups through improved access to better education in qualitative and quantitative terms, and to contribute to stabilizing and improving living conditions in Gaza through better opportunities for economic and political participation.

Since the appraisal, the literacy rate in the overall population has increased by 5.4 percentage points to 97.8 %. At the same time, the net enrolment rate increased in both primary and secondary education, although it remains lower in secondary education. Dropout rates are lower in secondary than in primary education, but the percentage of boys and girls aged 15 and over who stop going to school is high.⁹ Similarly, school completion rates are high at primary level, but decline progressively at the upper levels. While 99.2 % of children completed primary school in 2019, the completion rate in upper secondary school was only just under 64.5 % - a decline compared to 2009, which is precisely due to the fact that boys in particular no longer attend school from the age of 14. The main reasons were insufficient high-quality education (high pupil-teacher ratio, overcrowded classrooms, etc.), the experience of physical and emotional violence by teachers and peers and armed conflicts.¹⁰

Indicator	PA 2004	Final review EGP VIII 2018; EPE 2020
(1) Literacy rate	2004 in %: 92.4 (female: 88.7; male: 96.1)	2017 in %: 97.0 (female: 95.7; male: 98.3) 2019 in % (last available year): 97.8 (female: 96.7; male: 98.9)

⁸ According to the specifications for the construction companies, the share of wages was to amount to 25% of the total construction cost and the construction workers were to be paid the minimum wage; the requirement for the share of wage costs was achieved; final review EGP School Construction Gaza VIII 2017, p. 11.

⁹ UNICEF 2018: State of Palestine – Country Report on Out-of-School Children. Accessible online at https://www.unicef.org/oPt/OOSC_SoP_Full_Report_EN.pdf (11.11.2020).

¹⁰ UNICEF 2018: State of Palestine – Country Report on Out-of-School Children. Accessible online at https://www.unicef.org/oPt/OOSC_SoP_Full_Report_EN.pdf (11.11.2020).

(2) Increase in net enrolment rate (a) Primary level (1-10) (b) Secondary level (11-12) years)	2003/2004 in %: (a) 90.2 (female: 93.4; male: 87) (b) 55.3 (female: 60.0; male: 49.9)	2017 in % (last available year): (a) 98.9 (female: 99.7; male: 98.2) (b) 80.7 (female: 88.4; male: 74.3)
(3) Dropout rate (a) Primary level (1-10) (b) Secondary level (11-12)	N/A	2014/15 (last available year): (a) 1.9 % (b) 0.7 %
(4) Completion rate (all schools) (a) Primary level (1-4) (b) Secondary level I (5-9) (c) Secondary level II (10-12) ¹¹	2009: (a) 99.2 % (female: 99.4 %; male: 98.9 %) (b) 92.7 % (female: 95.9 %; male: 89.7 %) (c) 65.3 % (female: 71.9 %; male: 59.1 %)	2019 in % (last available year): (a) 99.2 % (female: 99.5 %; male: 98.9 %) (b) 92.7 % (female: 96.8 %; male: 88.7 %) (c) 64.5 % (female: 73.2 %; male: 56.2 %)

Furthermore, the Israeli-Palestinian conflict also seems to be reflected in the students' academic performance. A study by the Palestinian MoE concludes that the psychological impact of the blockade of Gaza, which has now lasted for more than 10 years, has led to deteriorating academic outcomes and difficulties in reading and writing for about 50 % of pupils aged 5-17 years.¹² In addition, the persistent power cuts in Gaza, a shortage of teachers and insufficient equipment in schools also make effective learning difficult.

Whether and to what extent the project still contributed to political stabilization and improving living conditions in Gaza cannot be answered conclusively. The fact that education plays a fundamentally stabilizing role is shown by surveys among young Palestinians, who generally have great confidence in educational institutions. It also shows that the higher a person's level of education, the lower the percentage who say they feel insecure because of the occupation and the lack of employment opportunities. At the same time, the higher a person's level of education, the better they rate their own economic situation.¹³ With regard to the economic living conditions, the employment measures as part of the school construction have also had a short-term effect on the economic situation of workers. However, the fundamental persistence of poverty in Gaza continues to be the reality for many Palestinians.

Overall, with regard to the overarching developmental impacts, it has been possible to maintain the relatively high level of education with persistently high demographic growth and to stabilize the country and its institutions in the education sector; however, a better level of schooling for the target group and a significant improvement in living conditions cannot (yet) be demonstrated. The contribution of an individual project to the (educational) situation in the country is also limited to 10 schools. For this reason, we assess the overarching developmental impact as satisfactory, but below expectations.

Impact rating: 3

Sustainability

With ongoing conflicts in the Gaza Strip and the security situation worsening to dangerous levels at times, the risk to regular school operation in the long term is considered high. In addition, due to the political

¹¹ In 2017, secondary education was extended to 3 years, i.e. from grade 10 to grade 12.

¹² MoEHE 2016: Study on Blockade Impact on Education 2006-2016.

¹³ Khatib 2018: Abkehr von der Politik. Eine Umfrage unter jungen Menschen in Palästina. Accessible online at <http://library.fes.de/pdf-files/iez/14420.pdf> (11.11.2010).

tensions between Hamas and Fatah, salary payments for teaching staff in the Gaza Strip are not always guaranteed (on time). In addition, there are chronic bottlenecks in the budget of the Ministry of Education, which is heavily dependent on donor grants to perform its duties (including investment, operating and maintenance costs) (reliable data on this is not available). Funding for ongoing maintenance and periodic reinvestment needs for the schools is therefore not guaranteed. Even the fees charged by the school canteens are far from sufficient to finance the maintenance work.¹⁴ However, parents, teachers and school administrators have a strong commitment to participate in maintenance and upkeep tasks, which has so far also been reflected in the good condition of the schools.

Given the existing risks, it cannot be ruled out that the positive effects of the project achieved with the schools will decline – despite the low-maintenance construction method – but still remain positive. From today's perspective, the sustainability of the project is rated as satisfactory.

Sustainability rating: 3

¹⁴ The fees from the school canteens as a secure source of funding for ongoing maintenance costs are relatively low; the 15 per cent fee was limited to an average of only EUR 644 per school in 2019 across the 10 schools.

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

Projects (and programmes) 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).