

**El Salvador: Health Care Institute ICAS**

**Final follow-up / Ex-post evaluation**

<b>OECD sector</b>	11420 – Tertiary education	
<b>BMZ project ID</b>	1) 1994 65 907 (Investment in fixed assets) 2) 1994 138 (Personnel support / training)	
<b>Project-executing agency</b>	Universidad Centroamericana José Simeón Cañas (UCA)	
<b>Consultant</b>	1) Local consultants 2) Liverpool School of Tropical Medicine	
<b>Year of ex-post evaluation</b>	<b>2005</b>	
	<b>Project appraisal (planned)</b>	<b>Ex-post evaluation (actual)</b>
<b>Start of implementation</b>	1) Q 1 1995 2) Q 1 1997	1) Q 1 1996 2) Q 1 1997
<b>Period of implementation</b>	1) 36 months 2) 24 months	1) 51 months 2) 24 months
<b>Investment costs</b>	1) EUR 6.89 million 2) KEUR 55.7	1) EUR 6.05 million 2) KEUR 53.9
<b>Counterpart contribution</b>	1) EUR 1.26 million 2) -	1) EUR 2.04 million 2) -
<b>Financing, of which Financial Cooperation (FC) funds</b>	1) EUR 5.62 million 2) KEUR 55.7	1) EUR 4.01 million 2) KEUR 53.9
<b>Other institutions/donors involved</b>	-	-
<b>Performance rating</b>	3	
<b>• Significance / relevance</b>	3	
<b>• Effectiveness</b>	3	
<b>• Efficiency</b>	2	

**Brief Description, Overall Objective and Project Objective with Indicators**

The objective of the project was to improve the qualification of the personnel working in El Salvador's health sector. In this way, it was to contribute to improving the quality of the healthcare (overall objective). The direct target group comprised doctors and medical assistants in need of training. The indirect target group comprised those parts of the rural and mostly poor population who stood to benefit from an improvement in healthcare and from the services of the "Centros de Interacción Social" (CIS).

The plans at the time of the project appraisal provided for the foundation of the health institute "Instituto Centroamericano de Ciencias de Salud" (ICAS) as well as the construction and equipment of ICAS buildings and four CIS health centers. As the CIS component was later cancelled, the investments that were ultimately financed included the construction of one building and its equipment with a technical system, furniture and medical laboratory equipment. The training and advanced training measure aimed to further qualify the teaching staff in the fields of health management, health economics and health counselling as well as the procurement of teaching materials.

The fulfilment of the following indicators was to show that the project objective was at least attained:

- a) Enrollment in each course is 80%;
- b) Eighty percent of the students who begin each course of study successfully complete it;
- c) Eighty percent of the graduates go on to work in the public health sector or for an NGO active in this sector.

The overall objective was automatically considered fulfilled once the project objective was met.

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

The project was designed after nearly 12 years of civil war in El Salvador, during which time numerous health facilities were closed down and education and training in the field of health care suffered heavily. The main problem identified during the project appraisal was that, as a consequence of the civil war, the educational sector in El Salvador could not satisfy the need for qualified education targeting the deficits in the country's health sector. In the entire academic field the privately run "Universidad Centroamericana José Simeón Cañas" (UCA) was considered the best choice for this task both staff-wise and organizationally and, after the government gave its consent, was assigned to build up a field of study focusing on teaching and research in public health care.

The project design aimed to encourage education and training in public health care by financing and equipping buildings for the health care institute ICAS of the private university UCA as well as for the CIS health centers, which were to be connected to the UCA. To achieve this, the plans called for the creation of three courses of study, two of which were not carried out as planned:<sup>1</sup>

- Postgraduate courses (Master's degree courses): for the most part, these courses were carried out as planned, although their duration was increased from 2 to 3 years.
- Short-term advanced training: since the readiness of public agencies to give interested staff members time off in order for them to take part in short-term programmes in specialized areas of public health care was low, and since the UCA could not award diplomas that were recognized by the state, the short-term training courses were cancelled due to a lack of demand.
- Training for village health workers: this course of study was also cancelled since the relevant rooms at the Ministry of Health and NGOs at the chosen CIS locations could be used instead for local training, in part by German Technical Cooperation (TC). For this reason and also because the UCA was expecting a heavy financial burden in connection with the operation and maintenance of the centers, the component aiming to establish the CIS health centers under the project was also cancelled. We consented to the cancellation of the corresponding project components.

The building work comprised the construction of a complex of interconnected buildings on the UCA campus with a gross area per floor of 4,200 m<sup>2</sup>. Thus, the area constructed exceeded the planning by approx. 25%. Fewer existing laboratory buildings were expanded and fewer new buildings were constructed since the capacities that were originally scheduled mainly benefited other faculties. In addition, roads, paths and parking lots were constructed to make the building

---

<sup>1</sup> The foundation of an own institute was cancelled. The postgraduate studies were offered by the Departamento de Salud Pública, which was also responsible for the training and advanced training measures and which reports to the "Decanato de Ciencias del Hombre y de la Naturaleza" of the UCA. The abbreviation 'ICAS' was retained to designate the buildings constructed under the project.

complex accessible. Overall the work performed fulfilled the purpose and was of good quality. The supplies tied to the construction measures comprised equipment for the ICAS building in the form of furniture, medical/technical devices and equipment, and computers. The supplies tied to the CIS (vehicles, drugs, consumables and furniture) were cancelled. In addition to the originally planned scope of supplies, laboratory equipment for the agricultural facility was acquired that can also be used for key health consumer protection tasks (including food testing) and by the ICAS. Overall, the supplies met the demand.

The package of measures also included planning services by national architects, construction monitoring and consulting services in the form of short-term expert assignments. These services were not quantified in more detail during the appraisal.

<b>Comparison between targeted and actual project measures under the investment in fixed assets</b>				
		<b>Target</b>	<b>Actual</b>	<b>Note</b>
<b>Building</b>	Building ICAS	X	X	
	Expansion of existing laboratories	X		1)
	Surrounding area (roads, paths, parking lots)	X	X	
	Building CIS	X		2)
<b>Equipment</b>	Furniture/equipment ICAS building	X	X	
	Furniture CIS	X		2)
	Medical/biotechnical equipment	X	X	
	Teaching materials (books)		X	
	Drugs and consumables CIS	X		2)
	Vehicles	X		2)
<b>Other</b>	Consulting services	X	X	
	Implementing unit	X	X	

1) Additional laboratories were part of a planned new project which KfW did not agree to finance.

2) Project component was cancelled.

The total project period was extended from 36 to 51 months. The reasons for this were a revision of the construction plans - which were initially too extensive – and contract award processes that were time-consuming but adequate in this form as well as heavy rains caused by Hurricane Mitch and problems with the soil conditions during the construction phase.

The purpose of the training measure was to train teachers in the fields of health management, health economics and health counselling. To achieve this, short-term expert assignments and teaching materials were financed. Overall the work was performed properly and was of good quality. As a result of the measure, the didactic skills and capabilities of the teachers improved.

Since the CIS component was cancelled and due to architectonic changes, the cost estimate that was part of the project appraisal can only be compared with the actual costs under certain restrictions. Thirty-four percent of the costs were financed in the form of a counterpart contribution by the UCA, mainly in the form of building land, and the remainder of 66% was provided in the form of an FC loan on-lent by the government to the UCA as a grant. The FC funds (including the disposition fund) that were not yet disbursed at the time of the final follow-up in the amount of EUR 1.6 million were reprogrammed and went instead to the project 'Earthquake Assistance II' (2001 65 829), and the loan amount was reduced to around EUR 4 million. The costs associated with the training and advanced training measure were fully covered by the FC funds. The use of the funds was examined not only during the final follow-up but also by an external auditor; both examinations revealed that they had been used properly in all areas (investment, disposition fund, training measure).

Based on the information provided by the UCA, the building and the equipment are being properly maintained. The maintenance budget of USD 28,000/year was already insufficient at the time of the final follow-up. It has since been increased to USD 52,000. The medical/technical equipment is in operable condition, and the maintenance is being performed in accordance with adequate plans and handbooks. The ongoing and periodic maintenance of the building are organized appropriately. The ICAS building also has own operating staff, including an IT technician and a caretaker. Based on the information provided, it can be assumed that the condition of the building and equipment will remain good in the future as well.

Utilization of the capacity of the lecture rooms was recently at 66%. As is often the case with postgraduate studies, the utilization of the building's capacity is higher in the evenings (100%) than in the mornings (46%). In 2004, 280 events – some of them extending over several days – were booked in the auditorium; thus, the utilization of its capacity was adequate, contrary to the figure at the time of the final follow-up. The computer center is being utilized at full capacity. The laboratories and medical/technical equipment are being used regularly. However, the overall building is being used to only 25% for public health studies and to 43% for studies related to public health (social psychology, environmental sciences). Business management studies account for 25% and doctoral candidates in philosophy for 7% of the room space.

One main reason for the low utilization of the created capacities for the original purpose (public health care) is the decentralization of the health services, which took place at the same time as the project. One of its impacts was that education and training for basic health assistants, for which a large share of the capacities built under the project was originally planned, are now no longer being taught at the UCA but instead at local facilities. A second impact was that the short-term courses had to be cancelled due to lack of demand. Since the construction work had progressed too far to abandon the project, the question arose as to a sensible, alternative way to use the excessive capacities. By establishing interdisciplinary courses of study (see above) that complemented the offers of classic health services, the UCA has found an adequate solution that will be readily accepted and is easily integrated into the new health sector policy. The remaining capacities (approx. 1/3) are being used for other courses of study, mainly business management. The fast and flexible reaction of the project-executing agency to utilize more of the buildings' capacity must in principle be considered highly positive. Due to the reduced project contribution to better qualify the public health personnel, we consider the project's general design to still be sufficient overall.

### **Key Results of the Impact Analysis and Performance Rating**

From a microeconomic point of view, the course of study is designed as follows: during the first two years, participants pay fees currently totalling USD 1,480 p.a. The fee for ensuing years is USD 960 p.a. This is sufficient to cover the costs of personnel and materials for the studies, which currently add up to USD 800 per year and student. In addition, of approx. USD 500 per student/year are left over on average to cover central administration and services and user fees for the ICAS building. Therefore, the revenues are higher than was assumed at the time of the project appraisal, since the originally estimated number of students more than doubled, the duration of the studies was extended, and considerably higher tuition fees were charged (original plans called for around EUR 600/year. The target group has to raise a considerable sum to finance these costs, since contrary to the assumptions at the time of the appraisal the UCA offers neither fee reductions nor scholarships. Thus, the financing of the course of study is in all likelihood ensured. Nevertheless, the high fees can also be seen as a risk to sustainability, should the need for corresponding further education be satisfied by other providers in the future who offer the same quality at lower cost. In the meantime the public "Universidad de El Salvador" has also started offering a similar course of study, but it does not match the level of quality of the UCA, which is recognized both nationally and in neighboring countries.

At the time of the project appraisal, the following indicators were defined to measure attainment of the project objectives (minimum requirements):

- 1) Enrollment in the courses to at least 80% (translates into 40 students taking Master's courses);
- 2) Eighty percent of the students who begin each course successfully complete it;
- 3) Eighty percent of the graduates go on to work in the public health sector or for an NGO active in this sector.

In view of the efforts that began during the project appraisal to open up the health sector to private service providers, the third indicator is no longer very meaningful. What is more, it rather resembles an indicator of achievement of an overall objective. It can be assumed that an improvement in qualification will have positive effects on the health sector overall, also in the private sector. In addition, at the time of the project appraisal it would have been a good idea to define an indicator to measure the degree of utilization of the building for the course of study 'public health' and by other users.

The figures on which the indicators are based are as follows:

- 1) Since public health studies were introduced, enrollment in these postgraduate courses has averaged 83%. As the number of new students has remained mostly stable, this indicator can be expected to be achieved in the future as well. Thus far around 200 students have earned a degree.
- 2) Seventy-seven percent of the students successfully completed their studies. This figure is only slightly below the expected figure at the time of the project appraisal of 80% and is acceptable overall.
- 3) The goal of employment of at least 80% of the graduates in the public sector or with an NGO was missed by only a slight margin (actual figure was 75%). The informative value of the indicator is limited, however, as the majority of the remaining graduates are not working in a completely different sector but rather in the private health sector. Thus, we consider the project's direct employment effects in the field of health care to be positive.

The use of the capacities of ICAS is slightly insufficient with regard to the original project objective. However, since alternatives were found that are generally compatible with the project objective, we consider the project objective to be achieved overall.

No indicators of achievement of the overall objective – which was to contribute to improving the quality of health care – were defined. Yet, in the Salvadorian health sector there is still a need for qualified personnel, especially following the overall successful decentralization process that has been supported for 10 years, in part by German Technical Cooperation (TC) and Financial Cooperation (FC). Many of the graduates found a managerial position in the health sector after completing their studies. This gives them a certain influence – albeit one that is difficult to quantify more precisely – to improve the quality of the health services. Therefore, the overall objective can be considered achieved.

The target group of the project was primarily doctors and medical assistants in the public health sector who were in need of training and/or advanced training. Some of them were reached through the project measures. The indirect target group comprised those parts of the rural and mostly poor population who stood to benefit from an improvement in public health care and from the services provided by the CIS health centers. Since the CIS component was rightly cancelled, the project design no longer contains a particular focus on the rural, poor population. It can be assumed, though, that the population in general is benefiting from the improved quality of public health care.

The following development policy aspects were looked at during the ex-post evaluation:

- The objectives defined for the project have no direct relevance to gender equality. With regard to the intended impacts, however, the project appraisal report mentioned an

improvement in the health situation of women and children. As the CIS component was cancelled, the actual impacts in this area are difficult to determine. Two-thirds of the students are women.

- The project does not pursue any environmental goals. It did not have any negative environmental impacts.
- No mention was made of poverty orientation during the project appraisal. However, the goal was to improve the quality of public health care. These general improvements are also particularly beneficial for the poor and enhance their productive potential.
- The project does not pursue any goals related to participatory development/good governance.

Currently there are no perceivable risks to the sustainable operation of ICAS.

On the basis of the key criteria of effectiveness, efficiency and significance/relevance we assess the project's developmental effectiveness as follows:

- The intention stated in the project objective to contribute to improving the qualification of the staff working in the health sector was achieved to a high degree. The majority of the thus far approx. 200 graduates found a position in the public health sector. At the same time, enrollment in the postgraduate courses was high, and a sufficiently high number of students successfully completed their studies. Nonetheless, short-term courses (100 students/year) and courses for village health workers (70 health workers/year) were cancelled. The generally low utilization of the capacity of ICAS for health science courses was partly compensated through the introduction of courses of study related to public health (consumer protection, environmental sciences). Overall, the project's effectiveness is still sufficient (rating 3).
- The costs of the construction measures of approx. EUR 600/m<sup>2</sup> are very low. We also consider the other costs to be adequate. As regards the achievement of the goals, though, the project's efficiency is mitigated since the intended impacts could have been achieved even if the building's design had been smaller. The financial situation of the course of study is highly positive since it enables the course offers to be maintained on a sustained basis in the future as well. The project's efficiency can be classified as satisfactory overall (rating 2).
- From today's perspective, the original project design was only suitable to a certain degree for improving the quality of health care in El Salvador (relevance). Thus far over 200 students completed the Master's course of study and have a position that gives them influence on the health sector. Additional planned impacts did not arise since the short-term courses and further training offers for village health workers (up to 100 and 70 students annually, respectively) were cancelled. The UCA does not have any information about the jobs found by graduates of the new courses of study on consumer protection and environmental protection. Therefore, the significance is limited in comparison with the original planning. Yet, we judge the significance / relevance of the project to be sufficient overall (rating 3).

After weighing the above mentioned key criteria we classify the programme "Health care Institute ICAS" as having attained a sufficient degree of effectiveness overall (rating 3).

### **General Conclusions**

For projects in the field of tertiary education, from the very beginning KfW should ensure that the design only includes courses of study that correspond to typical university courses. Training or advanced training courses that are to be held locally or on another level and will not be taught at the university in the short or long term are examples of courses that should not be included.

Insofar as the new courses of study are to be complemented by new university offers (e.g. short-term training courses, interdisciplinary subjects), detailed requirement analyses are to be carried out as part of the preparatory studies (project appraisal) or additional assessments (in case of adjustments during project implementation) in order to adequately determine the necessary room and equipment capacities.

## Abbreviations

CIS	Centros de Interacción Social
FC	German Financial Cooperation
ICAS	Instituto Centroamericano de Ciencias de Salud
NGO	Non-govermental organization
UCA	Universidad Centroamericana José Simeón Cañas

## Legend

Developmentally successful: Ratings 1 to 3	
Rating 1	Very high or high degree of developmental effectiveness
Rating 2	Satisfactory degree of 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 above 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, organizational and/or technical support has come to an end.