

Chile: Rehabilitation of Hospitals II and III

# **Ex-post evaluation**

OECD sectors	12191 – Medical services	and some all and the links of
BMZ project number	12181 – Basic and advanced medical training Rehabilitation of hospitals II (RH II) Investment in fixed assets – 1992 65 455 Complementary measure - 1993 70 172 Training programme - 1994 131 Rehabilitation of hospitals III (RH III) Investment in fixed assets - 1995 65 011 Training programme - 1995 159	
Project-executing agency	RH II and III: Ministry of Health Chile (MINSAL)	
Consultant	RH II: Dr. Ricardo Keim, Santiago RH III: Dr. Rodrigo Contreras, Santiago	
Year of evaluation	2002	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	RH II: Q 2 1993 RH III: Q 1 1996	RH II: Q 3 1993 RH III: Q 1 1997
Period of implementation	RH II: 24 months RH III: 30 months	RH II: 56 months RH III: 48 months
Investment costs	RH II: EUR 22.58 million RH III: EUR 17.70 million	RH II: EUR 22.79 million RH III: EUR 19.21 million
Counterpart contribution	RH II: EUR 9.57 million RH III: EUR 4.46 million	RH II: EUR 9.78 million RH III: <mark>USD</mark> 5.97 million
Financing, of which FC funds	RH II: EUR 13.01 million RH III: EUR 13.24 million	RH II: EUR 13.01 million RH III: EUR 13.24 million
Other institutions/donors involved	RH II: - RH III: -	RH II: - RH III: -
Performance rating	RH II: 1 and RH III: 1	
Significance / relevance	RH II: 1 RH III: 1	
Effectiveness	RH II: 1 RH III: 1	
• Efficiency	RH II: 2 Production efficiency: 1 RH III: 2 Production efficiency: 1	

Brief Description, Overall Objective and Project Purposes with Indicators

The goal of the projects "Rehabilitation of Hospitals (RH) II and III" was, in continuation of the first phase, to contribute to improving the health situation of the predominantly poorer Chilean population in another 12 (RH II: Maule, O'Higgins, Coquimbo and Osorno. RH III: Arica, Atacama, Viña del Mar-Quillota, Ñuble, Talcahuano, Bío-Bío, Aysen and Magallanes) of the altogether 29 health districts (Servicios de Salud – S.S.) in Chile. This was to be accomplished by improving the diagnostic and therapeutic possibilities, mainly on the second level and – if necessary – on the third level of the reference system. The projects RH II and RH III included the supply of equipment as well as individual construction measures at a total of 93 facilities in the public health care sector. The investment costs for both phases totalled around EUR 42.0 million, of which EUR 25.38 stemmed from FC loan funds and EUR 0.87 million from complementary and training measures, with the remainder provided out of Chile's budget. The Republic of Chile is both borrower and project-executing agency; it is represented by the Ministry of Finance in matters concerning the loan and by the Ministry of Health (MINSAL) with respect to project implementation.

As was the case in the previous phases, in RH III as well the appropriate use of the equipment acquired under the above mentioned investment measure was supported by a training and advanced training measure. RH II also involved staffing support financed under FC in the form of a complementary measure amounting to EUR 0.18 million serving mainly to provide the executing agency with advice in the fields of project coordination, operation and monitoring. The staffing support was continued in the phase RH III but it was financed through the FC loan.

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

Despite high flexibility during implementation there was a very high degree of <u>congruence</u> <u>between</u> the planning and the implementation with regard to the distribution of the supplies among the individual institutions and the various areas of acquisition.

Compared with the planning the project measures in RH II and RH III were realized nearly in full. In RH II the measures were split up among 47 facilities (planning: 45) (4 regional hospitals and 39 district hospitals, 4 directorates for primary care). In RH III 46 facilities (planning: 47) were planned (4 regional hospitals and 36 district hospitals, 3 laboratories for environmental hygiene, 1 urban health care center and 2 directorates for primary care) and 6,310 individual pieces of equipment in 2,073 different categories were acquired (planned: 6,245 items in 2,134 categories).

<u>Modifications</u> were made primarily in connection with interim financings from other sources or with requests for changes by the health districts. The costs of some equipment upon acquisition were higher than planned, due in particular to the development of better technologies during the period of implementation. All financial surpluses resulting from advantageous exchange rates were invested in additional acquisitions. Instead of the planned USD 13.7 million a total of USD 14.7 million could be invested in equipment under RH III.

The largest <u>unplanned</u> <u>individual measure</u> under RH II that was financed through FC funds was an addition to the Parral hospital (approx. KEUR 230) that became necessary because of the unscheduled closing of the health care facilities in Colonia Dignidad.

Unplanned individual measures under RH III that deserve mention are building repairs for the health care facility Cabildo in health district Viña del Mar - Quillota (KEUR 30.68), in Quilpue and in Los Angeles in the health district Bio-Bio. As planned, the largest portion of the investments was spent on health care facilities on the middle health care level (54%).

After the warranty period expires, repairs to the equipment are ensured in the long term by corresponding long-term contracts with private companies. They also cover training for the staff

of the health care centers in the installation and maintenance of the equipment. Thus, in RH III instead of long-term <u>cost assumption for maintenance measures</u> as provided for in FC (which, in case of financing through FC funds, would have involved high administrative expenses for the project-executing agency and for FC after completion of implementation) those costs for the so-called "critical areas" (áreas críticas – acquisition of spare parts for amortized equipment, measures to improve waiting rooms and entrance areas) were covered that should have been financed initially by the Chilean executing agency with its own funds. Instead, needed long-term maintenance measures are now being financed with counterpart funds.

The <u>implementation</u> of the project RH II began in November 1993 owing to delays in the conclusion of the bilateral agreement by about one year. With a total of 56 months the planned period of implementation was exceeded by 32 months, due primarily to the necessity of a programme for residual funds. Yet all measures could be implemented faster and more in conformity with the planning than in the first phase.

The project RH III began in November 1996. In seven of the eight health districts the measures were finished in the planned implementation period of 36 months. There was an acceptable one-year delay in the health district of Viña del Mar – Quillota only, which was mainly the result of the high concentration of investments (33%) on this district.

The training contents and the organization of the <u>basic and advanced training programmes II</u> and <u>III</u> complied with the requirements in the implementation proposal and were even expanded to cover many more events and participants than originally planned thanks to financial contributions by the executing agency and cost savings in the courses. 90 courses with 515 participants were carried out under training programme II (planned: 63 courses with 316 participants). Under training programme III even 227 courses were carried out (planned: 182), from which about 1,960 doctors, nurses and technical assistants (planned: 1,487) were able to benefit. Additionally, in RH III a small amount of audio-visual equipment was acquired to support the independent continuation of the training measures.

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

In general, projects RH II and RH III have achieved a very high degree of developmental effectiveness with very high system effectiveness overall (rating 1). The actual use of the capacities generated by the projects is outstanding. In the supported regions the projects set the conditions not only for reestablishing access to basic medical care that is state-of-the-art and deals with the problems at hand but also for maintaining this access, as shown by the operational results to date (very high significance - rating 1). The aspired goals and the main developmental impacts have been achieved to a large extent. The fact that the impacts were felt by the target group and intermediaries, the project's broad-scale effectiveness and the relative importance for the solution of the problem are, overall, very high (high relevance). Also, impacts that encourage structure-building have been achieved in the medium term. The goals were reached with a very good ratio of funds used to expenses (very high production efficiency rating 1). Despite a few deductions for structural reasons, the allocation efficiency can be classified as satisfactory (rating 2). The need to catch up in this regard has been recognized by the Chilean partners and is to be taken care of successively. No undesired side effects worthy of mention occurred. Therefore, we assign both RH II and RH III overall the performance rating 1 (very high developmental effectiveness).

#### **General Conclusions applicable to all Projects**

After completion of phases II and III, the following conclusions can be drawn:

- The completed FC projects led to improvements in the public health care system that can be felt all over the country. This enables the public system to correctly carry out its mission to provide health care. The type and scope of the projects, together with an intensive political dialogue, generated structure-building effects since the project measures helped to create new standards, not only for equipment with medical devices but also for the operational processes, the maintenance culture and the acquisition procedures (local organization of international tenders) standards that match those of the private sector. The concentration on investments benefiting the second reference level is a sensible developmental strategy from today's point of view as well since the most urgent demand by far is on this same level.
- The decentralization of the project implementation in this case proved to be very beneficial since it accounted for the local situation and the corresponding preferences and thus led to a feeling of "ownership", which is vital to sustainable project success. Also after completion of the three stages of implementation the decentralized procedure of equipment acquisition and other processes that were previously centralized can be noted. Thus, it can be said that structural effects were encouraged following the projects.
- The projects particularly emphasize improving the medical/technical equipment. Frequently the other hospital areas could not keep up with these modernization measures, so that there were often differences between the clinical departments and the rest of the hospital infrastructure, especially the nurses' stations. Although this does not directly dampen the increase in the functionality of the project hospitals and the diagnostic and therapeutic improvements, in the long term it can cause the dissatisfaction of hospital staff and patients to grow. The efforts to raise awareness of this problem underwent considerable development during the course of the three phases. In spite of this, there is still a need for further implementation which, in the future, will essentially depend on the financing available. The Chilean partners are continuing on their chosen path and are increasing the courterpart funds provided, also for the nursing area, via the so-called "normalization programme" that is planned.
- The recommendation offered following the final follow-ups for RH I and RH II for greater efforts in the field of maintenance was taken into sufficient account. The remaining maintenance works continue to be dependent on the overall financial situation. We have called the executing agency's attention to the fact that in the future, both the maintenance situation and also the general functionality of the public hospitals will probably depend on a general expansion of the local scope for action in business matters. This also includes the additional recommendation for the introduction of a system of cost calculation. To date such a system has been applied under some satisfactory approaches, but it has not been introduced on a broad scale.
- Already at the time of the follow-up evaluations of RH I and RH II the possibility of insufficient coverage of the operational costs and the limited opportunities of self financing of needed investments in replacements and new items were the only remaining risks, and they continue to exist. In contrast, the infrastructural conditions for adequate health care have, for the most part, been met, and the required personnel has also been qualified and enough staff are available. Enhanced awareness and first reform initiatives to create a better business incentive structure can be identified. Until implementation we observe a risk to sustainable operation that is, at most, average, resulting from the traditional budget allocations and current information deficits regarding relevant, key business data.

## 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, no longer sufficient 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 a project's "developmental effectiveness" and its classification into one of the various levels of success described in more detail below during the final evaluation 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 concept)?

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 is 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 its own and generate positive results after the financial, organizational and/or technical support has come to an end.