Bolivia: Rural Emergency Programme (FDC I), Rural Infrastructure (FDC II)

Ex-post evaluation

OECD sector	43040 / Rural Development	
BMZ project ID	1) 1993 66 105 2) 1997 66 049	
Project-executing agency	1) Fondo de Desarrollo Campesino 2) Fondo de Desarrollo Campesino Residual en Liquidación	
Consultant	1) Local national consultant 2) Local national consultant	
Year of ex-post evaluation	**2005**	
	Project appraisal (planned)	**Ex-post evaluation (actual)**
Start of implementation	1) 12/1994 2) 04/1998	1) 08/1995 2) 12/1998
Period of implementation	1) 36-60 months 2) 36 months	1) 48 months 2) 28 months
Total cost	1) EUR 5.62 million 2) EUR 7.00 million	1) EUR 5.88 million 2) EUR 6.34 million
Counterpart contribution	1) EUR 0.52 million 2) EUR 0.00 million	1) EUR 0.77 million 2) EUR 0.00 million
Financing, of which Financial Cooperation (FC) funds	1) EUR 5.1 million 2) EUR 5.1 million	1) EUR 5.1 million 2) EUR 5.1 million
Other institutions/donors involved	1 & 2) GTZ (FZ/TC-CP)	1 & 2) GTZ (FZ/TC-CP)
Performance rating	3	
• Significance / relevance	2	
• Effectiveness	3	
• Efficiency	4	

* Not counting counterpart contributions of the communities (approx 8-10% of the costs of the individual project).

Brief Description, Overall Objective and Project Objectives with Indicators

The investment fund Fondo de Desarrollo Campesino (FDC) has financed small basic rural infrastructure projects (roads, bridges, small irrigation schemes, markets) under the "Programa de Inversiones para el Desarrollo Campesino" (PIDC). The FDC I project ("Phase I") focused on particularly poor provinces in the Andean Departamentos of La Paz, Chuquisaca, Cochabamba, Oruro and Potosi as well as in the Chaco region. The FDC II project ("Phase II") covered only measures in selected provinces of the Departamentos of Chuquisaca and Potosi as well as in the Chaco region. Both projects were designed to contribute to improving the agricultural infrastructure in the programme areas (project objective) and the economic situation of the target group (overall objective). The project FDC I also pursued the aim of creating temporary employment and income for the poor peasant population. Both programmes were carried out as open programmes in the form of FC/TC cooperative programmes in the stricter sense. The TC measures focused on general institutional capacity building.

The overall objective of both programmes was to improve the economic situation of the target group and thereby to reduce rural poverty.

Indicators for the achievement of the overall objective were not defined at the time of programme appraisal. The overall objective was considered achieved if the programme objectives were achieved.

The programme objectives and indicators were defined as follows at the time of programme appraisal:

Phase I

Programme Objectives:

(a) short-term: temporary creation of additional employment and income for the population by involving them in the labour-intensive implementation of rural basic infrastructure projects.

(b) long-term: improvement of production conditions (general infrastructure) in the rural programme regions.

Indicators:

(a) short-term: share of wages of at least 20% in the total cost of the individual projects.

(b) long-term: at least 60% of equipment properly operated and utilised at time of final inspection.

Phase II

Programme objective:

(a) short-term: the short-term employment objective was no longer pursued in the second phase

(b) long-term: identical to Phase I

Indicator:

b) After three years of operation at least 70% of the equipment in place is being operated and utilised properly.

A certain inconsistency in the target system (Phase 1) consisted in the fact that the target group was intended to benefit from temporary employment effects and resulting income effects while being encouraged at the same time to provide unpaid counterpart contributions which they have largely rendered. With regard to the project objective indicator relating to proper operation it appeared justifiable to raise the indicator in a follow-up phase although the level of 60% and 70% appears to be clearly too low at least in Phase I and still too low in Phase II. A level of at least 75% appears to be reasonable.

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

The poverty relevance consisted in the fact that the programmes focused on particularly poor provinces in the Andean Departamentos of La Paz, Chuquisaca, Cochabamba, Oruro and Potosi as well as in the Chaco region. The demand-oriented implementation conception defined at PA (programme appraisal) was observed by both projects.

The executing agency FDC paid visits to the locations to make sure that the project applications submitted by the communities reflected the actual priorities of the users and complied with the programme guidelines. The application documents were revised with the support of the FDC when necessary (financing of an external engineer) and then resubmitted for evaluation. The individual projects were then introduced into the communal development plan (proof of allocation of the counterpart contribution to the community budget). The FDC concluded contracts on the implementation and operating procedures with the parties involved (communities, users, NGOs). Construction work was performed either on the basis of contracts awarded upon competitive bidding or directly, or on force account, depending on the executing institution. During Phase 1 the executing organisations were mostly NGOs at first. Later the communities assumed a more active role here, particularly in Phase II. The communities, many of which were very weak, were supported by the regional office of the FDC. The intervention of local enterprises familiar with the local conditions had a positive impact on the implementation. Existing institutional weaknesses of the FDC were partly offset by the services of the local consultant, particularly under Phase II. However, this contributed to an excessively high share of overheads (24% actual share against 7% target share at PA for Phase 1), particularly when the technical deficiencies that occurred in the supervision and execution of the construction works are included.

In retrospect, it appears that the assumptions that prevailed on financial transparency at the time of PA were too optimistic. Financial irregularities occurred at FDC despite the support provided in this regard by the TC consultant, although there was a manual with binding instructions on the relevant procedures, and although an international auditor was contracted. In retrospect the chosen implementation conception thus has proven not to be fully adequate.

The supervision of construction was problematic in both phases. In the course of implementation the FDC regional office staff charged with supervising the construction was therefore supported by qualified engineers on a case-by-case basis (in-house staff or qualified Bolivian consultants). This did lead to some improvements but ultimately failed to bring about a satisfactory supervision of construction. The inadequate supervision combined with inflexible cost limits led to a number of technical flaws (for instance, insufficient number of culverts and fords in roads), so that for some of the roads the maintenance requirements are higher than would have been necessary if they had been better designed.

The implementation period for Phase I had been conservatively estimated at five years at the time of appraisal. The institutional crisis of the years 1996/97 paralysed ongoing construction work for approximately one year. After the end of this crisis the implementation period of the projects largely returned to normal and the projects could be completed in roughly four years. At the time of PA the implementation of Phase 2 was scheduled to be around three years. It actually turned out eight months shorter because previously planned investment plans could be used.

Maintaining the individual projects is mostly the responsibility of the communities. Although there are usually enough funds there is a tendency to use budget funds primarily for new infrastructure facilities. There are no clear legal regulations governing the operation and maintenance of the irrigation systems and warehouses; these are privately used facilities but legally owned by the communities. Despite unclear ownership the operating problems are comparatively low. The traditional forms of user organisation that exist for small projects ensure that this infrastructure is being properly maintained even if no formal regulations were established (such as fees for irrigation water or the formation of collection offices).

The expected tariff increase for operation and maintenance formulated at PA was rightly regarded as a risk factor. In practice, no tariffs are being charged for the maintenance of public infrastructure projects; instead, maintenance is financed from the community budgets as and when needed.

German TC supported the FDC over a period of nearly 10 years (1991-1999). Initially, the TC consultant to the FDC was involved directly in the selection of the individual sub-projects of the two FC projects and supervised their implementation. His support was later limited to the structural reform of the institution and the development of instruments for project management and evaluation. There was close cooperation with TC.

The executing agency FDC underwent a major institutional change. Following a number of publicised corruption cases whose solution was obstructed for a long time by the Ministry of Labour, which was in charge of the FDC, the executing agency was transferred to liquidation in the course of the reorganisation of the Bolivian Social Fund in 2000 and ultimately dissolved completely. Since 2001 the Ministry of Finance has been in charge of the liquidation of the FDC by government decree and in March 2002 a lawsuit based on corruption allegations was filed against various management staff of the FDC. In the meantime various sentences have been pronounced. After the suspicion of corruption at FDC became known a neutral auditor was assigned to examine to what extent the two FC projects were also affected by it. The result was that misappropriation of funds actually did occur. However, as FDC had used funds of its own in the two FC projects that were higher than the agreed counterpart funds, these could arithmetically compensate for the misappropriated funds so that in accounting terms the corruption caused no material damage to the FC projects.

Key Results of the Impact Analysis and Performance Rating

Under Phase I a total of 62 investment projects were implemented (share in total cost around 72%), 40 preparatory studies (share in total cost of around 8%), some of which were also implemented under FDC II and by other programmes, as well as a training measure (share in total cost of around 1%). Three investment measures (total cost around 4% of investment cost) were not completed. The investment measures financed under FC focused on the sectors of rural road and bridge construction (cost share of 73%) and irrigation (cost share of 25%), while the component of markets/warehouses, on the other hand, was nearly insignificant. A total of 33 investment projects were implemented under Phase II. Unlike Phase I, no sector priorities were set at PA because Phase II had been designed even more strongly as an open demand-oriented programme. Most physical investments were actually made in the rural roads sector (cost share of 80%). Four investment measures (together accounting for around 6 % of investment cost) were not completed.

Interviews with the target group and on-site inspections on the occasion of the final evaluation on site gave the following picture with regard to the achievement of the project objectives:

- Many interventions were performed in very remote areas with a high poverty relevance. The population was involved relatively well in the planning and the projects largely matched their priorities. While this did have a generally positive impact on their sense of ownership it nevertheless must be stated that in many individual projects no formalised rules for upkeep and maintenance have yet been established. On the other hand, the participation of the target group in the implementation was rather limited, and temporary income creating effects tended to play only a minor role as well.
- The projects are usually being used intensively. Of the 29 individual projects visited by a local consultant as part of the final inspection (overall number of projects in FDC I and II: 95) 82% were in at least a satisfactory condition even though the responsibilities for maintenance are often not sufficiently clarified in institutional and financial terms. Where there is maintenance, however, it is mostly curative and not preventive. The communities tend to be sluggish in the performance of their maintenance tasks. Although the national employment creation programme PLANE does at least tend to have a favourable impact on the maintenance of rural roads, the fact that few roads in Bolivia are in good condition shows that there are serious deficits in maintenance and upkeep in the transport sector.

While the temporary employment objective was not fulfilled the individual sub-projects financed under the project have generally led to improved production conditions, so that we rate the programme objectives to have been mostly achieved. In accordance with the system of objectives, the programme objectives therefore are to be considered fulfilled as well. It must be concluded from the relevant information provided by the target group that the individual projects financed have the following further positive impacts:

- Access to important social services and economic infrastructure (schools, health posts, markets) has improved.
- The improvement of the irrigation infrastructure enabled the introduction of new crops designed mainly for commercialisation. As a result the income situation has improved. The nutritional situation has evolved positively as well.
- In the villages where sub-projects were implemented the improved income situation reduced migration and led to higher school attendance (for girls as well as for boys).

Overall, our assessment of the project's developmental impacts is as follows:

- The project objective of improving production conditions by creating an infrastructure for all productive enterprises in the project region has been achieved. The share of individual sub-projects being properly operated is over 75%. What has not been achieved were the short-term temporary employment and income targets set under Phase I. The combination of technical construction flaws (roads/bridges) and considerable institutional uncertainty about upkeep and maintenance and, in general, lack of funding, produces substantial risks to sustainability, particularly for the component of roads/bridges, the main portion of the FC financed projects, which are likely to require comprehensive maintenance work soon (periodic maintenance). We rate the overall effectiveness of the programme - in consideration of the many years of previous operation (some Phase I projects have been in use for 10 years) as still satisfactory (**sub-rating 3**).

- In retrospect the assumption that improving the general infrastructure in a region characterised by inadequate transport and agricultural production structures is suitable for achieving positive impacts on poverty reduction turned out to be correct as well. The sub-projects have led to improvements in the economic and social situation of the target group either directly through irrigation projects or indirectly through improved transport links to important parts of economic and social infrastructure (markets, schools and health stations). It appears plausible to attribute the statistically proven poverty reduction in some areas of the project region to the interventions of the two programmes as well. Therefore, we rate the significance / relevance of the programme as satisfactory (**sub-rating: 2**).

- We rate the production efficiency as low because of the institutional weaknesses and corruption affairs that ultimately led to the dissolution of FDC. The design and implementation of some of the sub-projects also left a lot to be desired. We also consider the high administrative costs of the FDC to be clearly exaggerated, particularly with a view to the services rendered. The fact that the users usually do not pay any fees for the irrigation water supplied in the irrigation projects has a negative impact on allocation efficiency. With regard to the roads/bridges the average traffic figures achieved are likely too low to permit a positive economic rate of return. We rate the overall efficiency of the project as not sufficient (**sub-rating: 4**).

In consideration of the criteria mentioned above, we rate the developmental effectiveness of the programme as sufficient overall (**overall rating: 3**).

A significant orientation to poverty reduction as well as a self-help element were part of the programme conception. The desired impacts have been achieved to a great extent. The beneficiaries rated the participatory processes as good on the occasion of the final inspection. Participation and good governance were an implicit secondary objective of the programme. There were no targeted measures to deliberately improve the living conditions of women, nor were there any explicit attempts to improve their relative living conditions at the time of PA. The sub-projects produced no discernible negative impact on the environment. The project was not geared towards protecting the environment or natural resources.

Conclusions and Recommendations

With the instrument of the "social investment fund", Latin America, particularly Bolivia, pioneered the creation of new intermediary structures for the realisation of smaller investments orientated strongly towards poverty reduction at the communal level. In retrospect, however, certain objectives were not achieved to the desired extent (generation of temporary employment and income).

On the institutional level it has become evident that merely establishing social investment funds as autonomous legal entities is not enough to adequately protect them from considerable and negative political influence. Likewise, the case at hand shows that paying the staff comparatively good salaries is not sufficient to effectively prevent corruption within the fund.

Given the vast possibilities of corruption resulting from the numerous donors and the high number of different and sometimes widely dispersed individual projects, as well as the generally high corruption proneness of the construction sector it is indispensable under the aspect of transparency that social investment funds possess a functioning integrated computerised monitoring system that provides a real-time overview of all sub-projects of the social investment fund and is thus usable as a controlling instrument. If the auditor's reports reveal deficiencies in this area of a social investment fund, this should prompt the financing donors to critically review their support.

Social investment funds usually represent only the executing agencies for the individual sub-projects which, in turn, fall under the responsibility of user groups or smaller territorial authorities like municipalities for operation and maintenance. One thing that is needed is an effective coordination between the social investment fund and the relevant sector ministries in cases in which the financed individual sub-projects require complementary inputs that are provided not by the user groups or municipalities but by the sector ministries (such as teachers or medical staff). For another thing, the tasks of a social investment fund should also include the strengthening of the sometimes inadequate maintenance and repair capacities at the municipal level through training and other measures to enable them to actually assume their future tasks in this area.

As it is usually the municipalities or user groups which apply for the sub-projects offered by the fund, social investment funds are considered an important instrument for the advancement of decentralisation. As the responsibility for their operation does not lie with the fund but with the user groups or municipalities, a fundamental prerequisite for the success of the corresponding approaches is that the institutions in charge of operation possess the necessary funds. In the case of productive sub-projects this presupposes the payment of corresponding user fees or, in the case of sub-projects for which no fees are charged (roads, schools, health stations), the existence of sufficient funds at the municipal level. In this regard a functioning municipal finance system (based on vertical fiscal equalisation as well as on fiscal sovereignty of the municipalities with functioning tax collection) is an important systemic prerequisite for the success of projects of this type.

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 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 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.