Contracting NGOs to implement rural water and sanitation projects in Bolivia
by Andrew W. Karp

Several years of little or no progress encouraged a project to try a radically different approach.

IN THE RURAL AREAS of Bolivia, over 80 per cent of the population lack potable water supplies. Latrine coverage is even worse. Since 50 per cent of the national population lives in these poorly served rural areas, mostly in very small villages, this is a serious problem.

Bolivia's population of approximately seven million people has the lowest per capita income in South America. This makes it essential that economical solutions be used to improve the water supply and sanitation situation of the country. The project described in this article works in the three most populous of the country's nine geographical departments. One of these three departments, La Paz, has about half of its area located in the cold and austere highlands (altiplano), where many villages are located at elevations of around 4000m above sea-level. Another department served by the project is Cochabamba, which is located at an intermediate elevation with a very agreeable climate. The third department is Santa Cruz, located in the tropical lowlands and including a large slice of the Amazon jungle.

The Child and Community Health Project

In 1989 the Ministry of Health began, with financing from USAID and the PL-480 programme, a five-year, twenty million dollar, Child and Community Health (CCH) project, which included almost five million dollars for improving rural water supply and sanitation in these three departments. The water and sanitation component was to be implemented by the Division of Environmental Sanitation (DES), which was the branch of the Ministry of Health responsible for such work.

As in many countries throughout Latin America, in Bolivia the Division of Environmental Sanitation (DES) of the Ministry of Health had long been responsible for rural water and sanitation. Unfortunately, the DES was not always very effective, despite having many very competent and dedicated employees. Based on the author's observations elsewhere, the problems faced by the DES in Bolivia were similar to those encountered by their counterparts in several other Latin American countries. They:

- The DES had an overload of conflicting responsibilities, all of which were important. For instance, technicians were called off water and sanitation projects during critical stages of construction in order to deal with the cholera epidemic which entered Bolivia in 1991. (Ironically, the spread of cholera is largely a symptom of poor coverage of safe water supply and sanitation services.) Other staff have devoted more time to the sanitary control of food and commercial beverages in urban areas than to rural water supply and sanitation.
- The number of staff, and the budgets, were inadequate.
- Staff turnover was excessive.
- There were labour problems, including frequent work stoppages.
- There were bureaucratic complications.
- In some instances it had been difficult to develop a good working relationship between the medical doctors, who hold virtually all positions in the Ministry at levels higher than the Director of the DES, and the engineers who run the DES.

(Ultimately, in November 1991, the DES was abolished by Presidential Decree as part of a reorganization plan for the sector. The functions of the DES were then divided between the Ministry of Housing and Urban Affairs, and the Regional Development Corporations which exist in each of the country's nine geographical Departments. Most of this article describes decisions and events which took place before this reorganization. The decisions and approaches decided upon continue to be applied in 1992, in co-ordination with those who took over the functions of the DES.)

By early 1991 the water and sanitation component of the CCH project had accomplished so little that USAID was considering de-obligating its funding. Work had not yet been completed in any communities, and had only even begun in three. Furthermore, work was behind schedule in these three communities because the initial selection and promotion criteria had not sufficiently taken into account social factors.

This mother and daughter in Catachilla Baja, Cochabambo, enjoy using their new yard top connection.
Unpaid community labour is used to dig the several kilometres of trenches needed for each system.

**This water storage tank will be part of a system serving a community of 500 people.**

In order to head-off USAID’s threatened de-obligation of funding, CCH realized that it was imperative that a change in approach be implemented as quickly as possible, and that it be demonstrated before the end of 1991 that work was progressing at an acceptable pace in a reasonable number of communities.

**The new approach**

In early 1991, eight months before the DES was abolished, it was decided that the most efficient way to proceed would be to contract out all community-level work. The DES, (and later its successor agencies and the Ministry of Health), continued with the responsibilities of selecting communities, setting standards, monitoring the contractors’ work, and co-ordinating the work overall. A crucial step was taken when the CCH decided to devise detailed implementation instructions for the NGOs — the ‘Bolivian Methodology’.

The Bolivian Methodology was developed using the WASH document Tech Pack: Steps For the Implementation of Rural Water Supply and Sanitation Projects as a ‘point of departure’. Preliminary modifications were made to make it applicable to piped water supplies (the WASH document is for handpump systems). Then, at a workshop attended by all institutions participating in the project, the methodology was further refined to adapt it to local conditions, and the responsibility for each and every task delineated in the methodology was established. The WASH document describes and discusses each task in much greater detail than does the Bolivian Methodology. To facilitate cross-referencing to the original WASH document, the numbering of the steps has been kept the same. (See pages 26-7).

It was decided that only NGOs should be considered for these contracts, because private (profit-making) firms in Bolivia lacked the necessary experience and concern for the social aspects of the project, such as community organization, the training of operators and water committees, and health education.

Although a large number of NGOs operate in rural Bolivia, it was found that only a few had experience with rural water and sanitation programmes. These included two NGOs in the Department of Cochabamba, three in La Paz, and two in Santa Cruz. All of these could be considered for undertaking work throughout a single Department, but none had the necessary experience to work in a wider geographical area than this.

It is planned that during the first three years of implementing projects through NGOs a total of 129 communities will develop piped water supplies and household latrines. Additionally, a yet-to-be determined number of communities will develop handpump water supplies, beginning in the second year of working through NGOs. Community size will vary, but might typically include approximately 500 to 600 inhabitants.

**Selecting collaborators**

Invitations for Proposals (IFPs) were issued and sent only to those NGOs which had expressed interest and appeared competent to undertake the work. The initial contracts were for a single year of work only, so that the CCH Project could test the performance of the NGOs before committing itself for a longer period. The contracts did not include the purchase of construction materials, which remained a responsibility of the CCH Project, and each contract was limited to a single Department of the country. Because of these limitations, each contract was for less than US$100 000, and based on this USAID approved the use of an ‘informal’ bidding process. This informal process allowed the contracting process to proceed more rapidly than would otherwise have been the case.

The IFPs included a detailed description of the Bolivian Methodology for project implementation, which each NGO had either to agree to, or to propose and justify modifications.

An Evaluation Committee was organized to decide which were the best proposals. After establishing that the proposals met minimum requirements, they were evaluated using a weighted point system as follows:

- **Social aspects**
  - maximum 30 points
- **Technical aspects**
  - maximum 30 points
The project requires all participating families to construct latrines, most of which are a pour-flush water-seal design.

Fieldwork
Fieldwork began in July 1991, but this had been preceded by the selection of the first 16 communities, and by promotion work in these communities by the local Health District and the DES. Because of this prior preparation, the NGOs were able to begin working immediately with the community water committees and undertake design work.

Until now (April 1992) the Project had only undertaken gravity-fed piped water systems, but the project intends to also install a yet-to-be determined number of handpumps in communities where small populations, dispersed layout, and hydrogeological conditions indicate that handpumps would be a more feasible and appropriate solution than piped water supplies. The project will begin by serving the most common need, which is for shallow-well (less than 12m pumping lift) handpumps. It will standardize on the Yaku handpump, which is the same locally-made handpump being used and promoted by a joint Dutch/World Bank/UNDP project in the Department of Potosí.

Water-seal pour-flush latrines have been emphasized, but other latrine technologies have also been used. The water-seal latrines have proved to be the most popular with users, and correspondingly are the most consistently used and best maintained. They are only appropriate where there is a very convenient source of water, however, such as a yard tap, and where the soil is at least moderately permeable.

As of early 1992 construction work in all of the original 16 communities was approaching completion, on or close to schedule, and work had begun in another 18 communities.

An internal evaluation in November 1991 indicated that the project was off to a good start under the new approach, and that there was every reason to expect continued success. Overall it is clear that the project is making much greater progress by contracting NGOs, than it did when the DES was responsible for this work.

This experience indicates that it is both possible and beneficial for a government programme to implement projects via local NGOs. Care is required in the contracting procedures, and the government may logically continue to set priorities and to select communities, as well as overseeing the work of the NGOs. Nonetheless, when working at the community level, NGOs can avoid many of the problems which inhibit the effectiveness of government-implemented projects.

References
1. Yacoob, Mary and Roark, Philip, Tech Pack: Steps for the Implementation of Rural Water and Sanitation Projects. This is available in English and Spanish from the WASH Project at 1611 N. Kent St, Suite 1002, Arlington, VA 22209-2111, USA, Fax +703 525-9137.

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