

Water and Sanitation Program

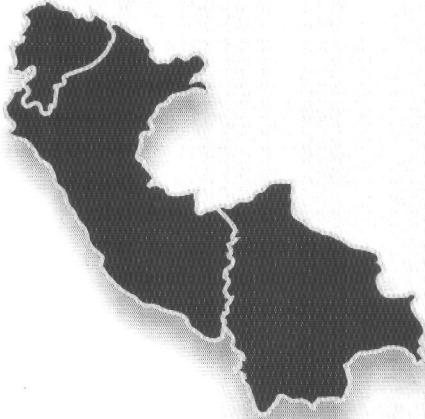
An International partnership to help the poor gain sustained access to improved water supply and sanitation services

LATIN AMERICA AND THE ANDES: Innovative Solutions for the World's Water and Sanitation Challenges

This year, 2001, the World Bank's Water and Sanitation Program (WSP) completes ten years of continuous presence in Latin America. It is currently active in Bolivia and Peru, as well as having made important contributions to rural water supply and sanitation programs in Ecuador. Over the past two decades, in the Andean region, the WSP has pioneered a series of mechanisms to resolve perhaps the most basic development challenge facing the world: the provision of safe water and sanitation to the millions of poor who cannot aspire to connections to supply systems and services. The Andean region both mirrors and spearheads overall WSP efforts to effect policy change, providing guidance for innovative thinking and practice on delivering sustainable services to those who need them.



WHY LATIN AMERICA?



Many countries have reassessed their international cooperation commitments over the past few years in the light of changing global conditions. In this rethinking of priorities, Latin America has tended to come off badly. Compared with most other developing regions, it may appear rather less crushingly poor, more "Western" and therefore less needy than - for example - Africa or the Indian subcontinent. Donors, often under political pressure, are increasingly earmarking their limited funds to food support, basic health and education programs in the very poorest of developing countries. More dramatic and specific problems such as AIDS have drawn financing away from apparently mundane initiatives like water and sanitation services for the poor. Yet provision of water and sanitation services in Latin America reflects the deep-rooted income inequalities of the region: statistically, coverage in both urban and rural sanitation in Latin America and the Caribbean is no better than for Africa. Asia has better rural water coverage while Africa and Latin America score similarly poorly on levels of rural sanitation.

A higher percentage of the populations of Peru, Bolivia, Haiti, El Salvador, Guatemala, Nicaragua and Honduras live below the national poverty line than in India, Nepal or Bangladesh. Exacerbating the situation, most countries in the Latin American region have registered low or negative economic growth rates in the last few years: the percentages living in poverty have declined more slowly or, in some cases (such as Peru) actually increased. Official development assistance flows do not reflect that reality.

Latin America is also a fascinating pointer towards how other regions of the world may develop. It has unique institutional structures, a long-standing history of private sector involvement and low-cost technological innovation. Many Latin American countries have gone far down the road toward decentralization and alternative management models and their long history of independent municipal government is an ideal breeding-ground for testing innovative ideas and approaches for bringing sustainable services to those who need them. Latin America offers a significant opportunity for learning lessons which can be transmitted to other countries at a less advanced stage of development.

"Learning lessons from countries further along the road to development allows others to leapfrog, and sharply cut the time taken to reach the same level. But that depends on organizations learning lessons and passing them on. If you don't have knowledge management, you are shooting in the dark once again." (Joseph Narkevic, Country Coordinator, Bolivia)

"Latin America is a decade ahead of the other regions where we are working: in involvement of consumers and of the private sector, and in decentralization. Sadly, the experience has been very little disseminated and tends not to cross the language barrier. We want to link up existing information available in Latin America with networks of people elsewhere. You cannot do that effectively unless you have a real presence in the region." (Barbara Evans, WSP Washington)

LIBRARY IRC

PO Box 93190, 3500 ZG Dordrecht, THE NETHERLANDS

Tel: +31 70 35 899 64

BARCODE: 18213

LO:

027 AAL01



THE WATER AND SANITATION PROGRAM

The WSP's objectives are to make an impact on the water and sanitation problems of specific countries, and to disseminate globally the lessons learned on the ground, thus enabling other countries in different regions to benefit. WSP concentrates its activities in five main areas:

- Policy support, helping design national policies and advocating reform and changes in legislation
- Investment support, working directly with donors or governments to help implement a reforming investment program
- Large pilot projects, city or statewide, that test new approaches
- Knowledge management, which involves complementing the original research by dissemination
- Networking

Globally, WSP has been operating for more than two decades in four regions: Latin America, Africa, South Asia and East Asia. Each of the programs looks quite different as each area is in a different stage of development.

However, all the programs work in rural areas, small towns and urban areas, and all involve hygiene and gender issues. Much has been learned about what works and does not work. Based on experiences worldwide, some rules have emerged about demand responsiveness in project design and implementation.

Stakeholder participation in designing, implementing and managing projects is key to sustaining coverage in rural and urban areas. The Program is also committed to the active participation of community members and the dissemination of participative methodologies.

WSP IN LATIN AMERICA AND THE ANDEAN REGION:

Impact and development / Learning and knowledge exchange

The WSP's over-riding objective is to contribute to the reduction of poverty in the poorest countries of the region while harnessing the experience of the region for use elsewhere.

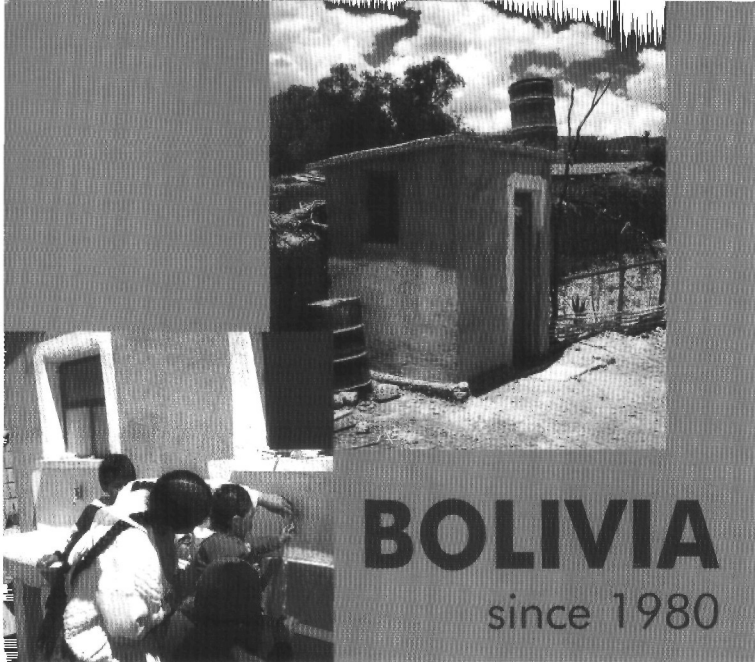
WSP is currently active in Bolivia and Peru, as well as having made important contributions to the implementation of rural water supply and sanitation programs in Ecuador. WSP has worked on the ground coordinating a successful demand-responsive approach for water supply in peasant communities in rural Bolivia. More recently, it has assisted in the installation of innovative programs such as the "condominial" in El Alto, the low-income satellite city close to the Bolivian capital La Paz.

In Peru, building on the basis of pilot projects, the WSP has been instrumental in facilitating the forging of a national strategy, hammered out by all the major local players. The WSP has collaborated closely with governments in the Andean region to facilitate the legislative and administrative changes essential to making innovative systems legal.

Transfer of knowledge both within the region and outside is a high priority. Most of Latin America shares a similar cultural heritage and common language, facilitating synergies. WSP casts its net wide: other countries, including Brazil, Argentina, Chile and Colombia - generally ahead of their Andean neighbors in economic terms - have provided invaluable experiences and lessons which WSP has identified, disseminated and selectively applied elsewhere.

With still more countries, WSP encourages and maintains a network of relationships. In each of the past two years, for example, it has taken experts to Central America, facilitating a fruitful exchange of experiences. WSP has also organized workshops in Nicaragua, leaving it well-positioned to make a forceful entry into Central America. Underlying each activity and every learning experience is the commitment to document and disseminate, so that accumulated knowledge is exchanged, valuable lessons are learned and approaches perfected.





BOLIVIA

since 1980

WSP has maintained a presence in Bolivia since the early 1980s although, in the early stages, it was not a full in-country operation. Rather, WSP supported projects, such as testing of handpumps and other technologies appropriate to rural areas.

RURAL AREAS

In 1991, building on years of accumulated experience, the Yacupaj project was launched in the Bolivian department of Potosi with funding of US\$2.7mn from the Netherlands government. (Yacupaj comes from the Quechua word for water.) Its objective was to test the new demand-led strategies for delivering rural water supply and sanitation to small communities. This meant working with communities, asking them what type of systems they wanted and were willing to pay for, and helping them reach their own decisions. The project established that while engineers usually opt for the most expensive technology, communities tend to want the alternative that is more affordable and easier to maintain.

Yacupaj proved a groundbreaking project in a number of ways. It demolished, for example, the widely-held assumption that impoverished Andean peasants, with their low demand for water, would not be prepared to pay for services (they contributed 30% of the total cost and no project was commenced until that had been paid). Instead of the traditional supply-led method where central or regional government bureaucrats decided which communities should benefit from piped water, what technology should be installed and what targets met, Yacupaj participants received full information about alternative systems and made their own choices based on the levels of management and costs involved.

Perhaps most importantly, Yacupaj proved that community involvement in decision-making brings far improved levels of sustainability. An evaluation three years into the project showed over 90% of the water systems installed were functioning and 82% of the latrines, a much higher percentage than normal: communities had carried out repairs where necessary and paid for them. The lessons learned from the Yacupaj pilot project served as the basis for a US\$46mn national rural water and sanitation project known as PROSABAR. In turn, this led to today's Proaguas, an IDB-financed project, that involves similar investment. WSP assisted in both the crucial preparatory phase and the subsequent execution period with a wide range of components, such as information management systems and evaluation of institutional arrangements.

Yacupaj also provided valuable experience for the WSP-assisted FASBASE program in Ecuador, a project to strengthen and expand basic health services with a water and sanitation component. In turn, the lessons learned in FASBASE were incorporated into the design of PRAGUAS, a new program for rural communities and small towns which relied heavily on empowering local and municipal communities to manage their own water services. It has been estimated that more than 670,000 people will gain access to sustainable water and sanitation services through PRAGUAS. The World Bank provided US\$50.25mn in financing for the program.

PERI-URBAN WATER AND SANITATION SOLUTIONS

The WSP-assisted El Alto condominium project is one of the Program's highlights. It replicates ample experience in Brazil, where condominium water and sewerage systems have existed since the 1980s. In Bolivia, one of the novelties is that the project has been carried out with private sector participation. The adaptation of Brazilian experience to Bolivia was financed by the WSP largely through support from the Swedish International Development Cooperation Agency (SIDA).

A key WSP achievement in Bolivia has been to spearhead an effort leading to the official modification of existing technical standards. Through dialogue, lobbying and patient consensus-building, new legislation will soon be approved to make the new technology legally acceptable.

CONDOMINIAL TECHNOLOGY- CUTTING COSTS IN URBAN NEIGHBORHOODS

In 1998, the WSP was instrumental in the start-up of a ground-breaking pilot project applying tried-and-tested Brazilian condominial technology in El Alto, a fast-expanding town on the edge of Bolivia's principal city, La Paz. By mid-2001, more than 5,000 households in the bustling but impoverished satellite city had been connected to sewerage services and 2,000 to piped water using the condominial approach.

Originally founded by out-of-work miners from rural Bolivia seeking employment possibilities in the city, El Alto sprang up from almost nowhere on a barren and inhospitable plateau 4,000 metres above sea level. It is one of the most deprived areas of Bolivia, with around 80% of its 600,000 inhabitants living below the poverty line: average per capita daily income is around US\$0.80, mostly earned through makeshift jobs such as street vending. Basic sanitation coverage is badly inadequate: under 45% of households are connected to sewerage systems compared to 66% down the road in La Paz, and health and hygiene standards are low. But poverty levels mean any expansion of basic services is a challenge: with their low incomes and water consumption levels, El Alto's settlers are not attractive potential customers for the local concessionaire.

The "condominial" system is a departure from traditional sewerage technology. Innovative engineering design means the length, diameter and depth of distribution and collection pipes is reduced: they are routed through the backyards of houses and run under sidewalks instead of down the center of traffic-bearing streets. There are savings of up to 20% on the length of piping used and up to 75% less soil must be excavated. Physical savings translate into overall financial savings of around 24% for sewerage and 40% for water services.

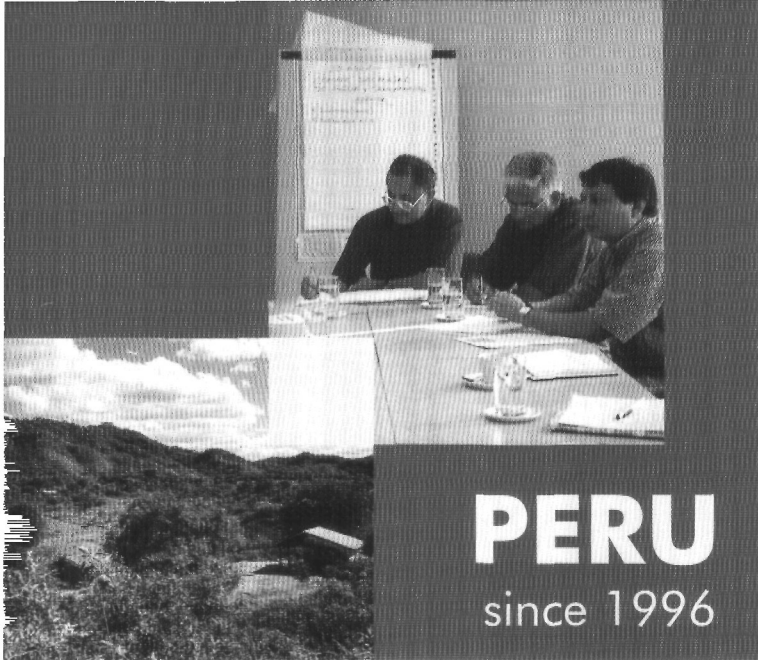
As important as the engineering innovation is the participation of the community. Drawing on experience gathered in rural development projects around Bolivia and condominial projects in Brazil, WSP ensured that El Alto's residents were involved from the outset in choosing their system. They received training in construction and maintenance. The use of community labor (in any case, a long-rooted tradition in the Andean region) resulted in overall savings of some 50% on installation of traditional sanitation services.

Since the bulk of El Alto's inhabitants are originally country-dwellers and unfamiliar with formal bathrooms, the WSP-assisted project incorporated a hygiene education component. Despite some initial resistance - primarily cultural - the net result was a significant increase in the previously low levels of water use and generally more hygienic practices.

In the El Alto project, promoters work in pairs: as important as the engineering technician who provides the know-how on installation, maintenance and repair is the social worker who helps the family understand how the system will operate and how to keep it in good order, as well as the proper use of bathroom facilities. Because locals had been consulted from the start, they were readier to accept and to value the new and unfamiliar infrastructure.

Talking about construction created a natural opening for wider discussion of such topics as water use and hygiene. Social workers found a direct correlation between the time invested in explaining benefits and the percentage of residents who signed up for the proposed condominial system. The importance of social workers should in no way be underestimated, experts concluded.





PERU since 1996

The WSP program in Peru started in 1996. WSP experts began with a far-reaching analysis of local experiences in water and sanitation, organizing a dialogue between Peruvian sector authorities, NGOs and agencies such as the Swiss Development Corporation, SDC, the Dutch technical cooperation agency, the Canadian Agency for International Development, CIDA and CEPIS. It soon became evident there was no existing strategy for rural sanitation.

One of the most striking problems was the low level of sustainability. Although some US\$2.4bn had been poured into water and sanitation in the past decade - US\$400mn into rural water services alone - only 40% of the systems built were fully operating: 30% were partially operative and 30% were in very poor condition.

The WSP-promoted analysis found three principal reasons: the poor quality of the infrastructure, the lack of local management boards or juntas (leading to poor management capacity and responsibility for maintenance), and the absence of trained local operators in each community. The absence of a demand-responsive approach meant that the community was not adequately involved and therefore did not adopt the finished work as its own.

With support and assistance from the WSP-promoted sector coordination group, the Peruvian government started working on a change in the law which was modified to include the concept of sustainability, the most important aspect for water and sanitation services in the rural area. Today, by law, any institution is obliged to build sustainability criteria into any project involving the provision of water and sanitation services.

Creating a viable sectoral strategy has taken some time. But the patient task of facilitating dialogue with some 20 institutions, each with its own agenda, paid off in agreement that Peru needed an innovative national project. PRONASAR, now in preparation with the assistance of the sector coordination group and WSP, involves initial funding of US\$50mn from the World Bank.

In parallel to its ongoing work in the historically neglected rural areas of Peru, WSP is swiftly expanding its involvement in mushrooming peri-urban areas and small provincial towns. In Lima, WSP has made diagnoses of water and sanitation problems in conjunction with the European Union and SEDAPAL, the capital's water and sewerage authority. In Iquitos, together with CARE, and in Chiclayo with state-owned water authority EPSEL, it is implementing ways of introducing condominal technology.

In Talavera, Andahuaylas province, WSP is working with Spanish NGO CESAL to develop a new management model for small-town water and sanitation services. This has already aroused considerable interest, with other Peruvian municipalities seeking to replicate the experience.

"Peru needs technical assistance, but it needs to be organized. What the WSP does in the region - developing policies and documenting experiences - is exemplary. The World Bank should be proud of the WSP. It's one of their great comparative advantages." (Augusta Dianderas, Ministry of the Presidency, Peru)

"WSP has done invaluable work in bringing many different public and private institutions together to share information, think about the common problems we face in water and sanitation and develop national policies and strategies. WSP is a model initiative which should be repeated in other key sectors." (Luis Tam, Water and Sanitation, CARE, Peru)



WSP: LOOKING AHEAD

Rural Areas

Decentralization - an immediate opportunity for effective action



For 2002 to 2007, WSP has drawn up a five-year partnership program designed to build on the rich experience and lessons learned in the Andean region. In this period, newly-empowered local governments will become true agents for development. Water and sanitation provision will play a crucial role in breaking down the barriers between the "haves" and the "have nots." The twin-pronged strategy addresses critical concerns in both urban and rural areas.

The majority of the poorest of Latin America still live in rural areas. WSP strategy will focus on ensuring investments are sustainable, and moving away from project-type interventions that are heavily dependent on outside sources of funding toward further strengthening of the demand-responsive approach. The application of lessons learned over the past 20 years in small and pilot projects will contribute to the scaling-up of effective investments in rural water and sanitation.

Decentralization provides a new opportunity for effective action in small towns and rural areas and Bolivia has already embarked upon the decentralizing path. Despite this, however, sector policies are not yet being decentralized. WSP has identified many areas where communications between national and local governments need improving as well as an urgent need for more effective technical support. New and constructive ways of resolving structural problems are already under way, improving coordination between local and central government bodies.

In the short term, municipalities in Bolivia will become unprecedentedly well-endowed with revenue. By law, they already receive 20% of the national budget, a uniquely large amount in Latin America. But, from this year on, municipalities' income will virtually double, when funds from HIPC (the debt forgiveness initiative for Highly Indebted Poor Countries) will go directly to them. They will also receive resources from the new national compensation fund, meaning that the US\$200mn they currently receive each year will virtually double. Since municipalities traditionally earmark around 10% of funding for water and sanitation, they will now be spending around US\$40mn a year for the foreseeable future.

Although Peru lags behind Bolivia in decentralization, the new government has made a firm commitment to Peru's municipalities, which have responsibility for administering water and sanitation systems. Currently, almost all have serious financial and management problems. As part of its five-year strategy, WSP will develop new approaches for often-neglected small and medium-sized communities and their utilities.

Urban Areas

Tackling urban poverty



Urbanization is one of the most important features of Latin America today, and the depth and speed with which urban poverty continues to spread across the region demands urgent attention. To make an impact on water and sanitation provision for the poor in fast-expanding urban areas, WSP strategy will concentrate on further developing promising models such as the condominium. It will also assist in designing improved approaches to resolving current structural constraints.

WSP is committed to developing strategies for pro-poor urban water sector reform. These include methodologies for mapping the poor, designing appropriate tariff and subsidy regimes and developing pro-poor transactions where the private sector is a player.

WHY INVEST IN THE WATER AND SANITATION PROGRAM IN LATIN AMERICA AND THE ANDEAN REGION

Building on its two decades of experience in the Andean countries, the WSP is about to embark on an ambitious five-year plan to scale up its water and sanitation programs in the region. While poverty reduction remains the WSP's over-riding objective, in this new phase lessons learned in the region will be more widely disseminated than ever before, allowing other countries at different stages of development to benefit from innovative mechanisms which have already proved their worth. The Program has a series of comparative advantages:

- **Global presence:** The network of WSP operations and skills around the world enables it to rapidly draw in relevant global experience with low transaction costs; at the same time, it builds bridges between countries grappling with the same problems. The global network allows the impact of lessons learned within the region to be maximized.
- **Regional presence:** The ability to flexibly deploy staff using partner organizations facilitates regional learning and the sharing of capacity and experience between countries of the region.
- **National Presence:** WSP's long term engagement with policy development and capacity building allows its partners to influence radical changes on a national scale and to make an impact beyond project or national boundaries.
- **Quality staff:** WSP field-based personnel include institutional, technical and social specialists from around the world. They represent some of the most up-to-date thinking and experience in effective water and sanitation service delivery. The close relationship to the World Bank enables the Program to create linkages between policy development and capacity building (implemented by WSP) and future investment programs (implemented by the Bank's operational units).

WHERE DOES TODAY'S FINANCING COME FROM?

In the early years, the World Bank and its founding partner the United Nations Development Program, UNDP, provided direct support for the WSP. Over the past two decades, funding from a group of bilateral donors has steadily increased: Switzerland, the Netherlands, Sweden, Norway and Denmark have been the principal donors in recent years for global aspects of the Program. Donations from the UK, Belgium, Canada, Luxembourg and Australia have a primarily regional focus. Latin America accounts for about 10% of overall budget.

For most of the 1990s, funding for the WSP Andean programs came from the Swiss Agency for Development Cooperation (SDC), the Swedish International Development Cooperation Agency (SIDA) and the Dutch government.

For more information contact:

Water and Sanitation Program Andean Region (WSP-AND)

World Bank Office, Lima
Calle Alvarez Calderón 185, piso 9
San Isidro, Lima, Perú
Telf.: (511) 215-0685
Fax: (511) 215-0689
Email: wspandean@worldbank.org
Website <http://www.wsp.org>



Cover photo: An Andean woman looks through a microscope at the bacteria in her current water supply. (Photo supplied by Proande)

Produced by: Peru Monitor S.A.
Diego Ferre 387,
Miraflores
Lima, Peru
Tel: 445-0525

Designed by: Haydee Yactayo
Tel: 425-3507

Lima, 2001