

# The new operators in Peruvian Small Towns

Designing a sustainable management model for water and sanitation services





# The new operators in Peruvian Small Towns

Designing a sustainable management model for  
water and sanitation services

Lima, January 2008

This publication has been made possible thanks to the support and effort of the following persons and institutions.

**Peer Reviewer:**

Enrique Oliveros, Consultant

**Water and Sanitation Program, Latin American and Caribbean Region**

Francois Brikke, Regional Director

Iris Marmanillo, Coordinator for Peru and Task Manager of the STPP

**Report prepared by:**

Oscar Castillo, Institutional Development Specialist

Jorge Luis McGregor, Consultant

Mercedes Zevallos, Consultant

Andrés Quispe, Consultant

**Production and editing:**

Beatriz Schippner, Regional Communications Specialist

Luciana Mendoza, Communications Assistant

**World Bank Office, Lima**

Álvarez Calderón 185, San Isidro, Lima 27, Perú

Phone: (511) 615-0685 Fax. 615-0689

Email: [wsplac@worldbank.org](mailto:wsplac@worldbank.org)

[http:// www.wsp.org](http://www.wsp.org)

**Copyright acknowledgment:**

Base on the Universal Copyright Convention, WSP holds all the rights of this study. However, reproduction of the material is permitted for educational, scientific or development work purposes mentioning the source.

Design and Layout: Ana María Origone

Printed in Peru by LEDEL S.A.C.

# Contents

Introduction .....	6
1. Background.....	8
2. Services in the small towns .....	9
2.1. Coverage in the towns in the pilot project .....	10
2.2. Charges .....	11
2.3. Investments in water and sanitation .....	12
2.4. The high costs of inefficiency .....	13
3. The new management model with a specialized operator .....	16
3.1. From public management to the new model with a specialized operator.....	17
3.2. The new Public-Private-Social Partnership .....	18
3.3. The promotion of specialized operators .....	19
3.4. The new institutional arrangement based on three actors .....	22
3.5. A shared decision between the municipality and the users.....	23
3.6. The Community Neighborhood Supervision Board .....	24
3.7. The benefits of the new model for the municipalities .....	26
4. The new role of the municipality, the ordinances and the specialized operator .....	27
4.1. The municipality and the promotion of operators .....	27
4.2. Criteria and procedures for selection.....	28
4.3. The charges and the poorest section.....	29
5. Characteristics of the contracts of the new specialized operator .....	32
5.1. Legal basis of the municipality-SO contracts.....	33
5.2. Contract guarantees.....	33
5.3. Adapting selection criteria to local conditions.....	34
5.4. Rights of the specialized operator .....	34

6. Creation of a market for specialized operators .....	36
6.1. Factors that influenced the lack of demand .....	36
6.2. Factors that influenced the lack of supply .....	37
6.3. The success of the STPP and its scaling up .....	38
6.4. Entrepreneurs and pioneers .....	38
7. Difficulties in the STPP pilot project processes.....	41
7.1. Lack of a specialized operator market .....	41
7.2. Political and social problems.....	41
7.3. Problems in terms of communications .....	42
7.4. Problems with expectations in terms of infrastructure .....	42
7.5. The transfer process.....	43
Lessons learned .....	44

# Acronyms

<b>CIDA</b>	Canadian International Development Agency
<b>PPSP</b>	Public-Private-Social Partnership
<b>PROINVERSION</b>	Agency for Promotion of Private Investment
<b>DNS</b>	National Sanitation Directorate
<b>EPS</b>	Service Provider Entity
<b>FONCOMUN</b>	National Municipal Compensation Fund
<b>INRENA</b>	National Institute of Natural Resources
<b>JASS</b>	Sanitation Services Administration Boards (that operate in rural areas)
<b>CNSB</b>	Community Neighborhood Supervision Board
<b>SO</b>	Specialized Operator (Private, Social or Mixed)
<b>PRES</b>	Ministry of the Presidency
<b>PCM</b>	Presidency of the Council of Ministers
<b>PRONASAR</b>	National Program for Rural Sanitation
<b>SAC</b>	Closed Corporation
<b>STPP</b>	Small Towns Pilot Project
<b>SUNASS</b>	National Superintendence of Sanitation Services
<b>MVCS</b>	Ministry of Housing, Construction and Sanitation
<b>WSP</b>	Water and Sanitation Program administered by the World Bank

# Introduction

In Latin America, the issue of water and sanitation services in small towns, is becoming increasingly relevant and is linked to the processes of political and administrative decentralization that are being implemented in the majority of countries, especially in the Andean region. The delegation of capacities to sub-sovereign governments<sup>1</sup> is oriented towards ensuring that decision-making is shared closely between local actors and the users themselves. Nevertheless, services in small towns, which in spite of their small size cannot be classified as rural areas or intermediate cities, have certain unique characteristics.

The term small town denotes different sizes in different countries. In Peru, small towns have between 2.001 to 30.000 inhabitants, in Bolivia it is around 5.000 inhabitants and in Colombia they can be up to 70.000 inhabitants. But, notwithstanding these differences, it has been recognized that all these towns have an issue in terms of the following aspects: financing (the small towns receive the least help and generate very less resources of their own); the legal framework (generally there is no express recognition of this issue); the management models (attention is prioritized owing to direct administration of local governments) and the quality of service (and users of the services are not given any information), among other aspects.

In the strategies to fight poverty and achieve the Millennium Development Objectives, attention to small towns is of special importance, considering the fact that at present they are not taken into account as such in the national programs and plans. More over, considering that in the case of Peru, it involves around 20% of the national population.

Given this background, the Water and Sanitation Program (WSP) in association with the Peruvian Government, implemented a project in Peru, involving nine municipalities: three provincial

---

<sup>1</sup> In Peru the sub-sovereign level refers to Regional Governments, Provincial and District level Municipalities.

(Sechura, Quispicanchi and Loreto) and six district level (Tuman, Laredo, Talavera, Fernando Lores, Nueva Cajamarca and Tabalosos) municipalities, as a pilot initiative. This was a pioneering effort in the water and sanitation sector to find new water supply and sanitation services management models in these towns. The initiative, with the participation of the local governments, was implemented through the “Small Town Pilot Project” (STPP) under the WSP, financed by the Canadian International Development Agency (CIDA) and supported by the Vice Ministry of Construction and Sanitation. The project was launched in the pilot project towns in October 2003 and was concluded in October 2007.


This is a unique and innovative experience in Peru and complements the initiatives developed in other countries of Latin America, such as Paraguay, Colombia and Ecuador<sup>2</sup>, in which other measures have been implemented to promote participation of specialized operators in small towns.

The seeking of solutions to improve supply of water and sanitation services in the small towns of Latin America is not limited to one single management model or to one single form of intervention. On the contrary there are diverse and multiple options, which must be adapted to the social, economic and legal reality of each region, in each country. Thus in Paraguay, the drinking water supply service was managed by the private sector with the “Aguateros” (water sellers) being the ones who took all the risks to develop this segment, without any Government support. Colombia, in the nineties, witnessed the evolving of a market of small and medium suppliers who managed the services in the small towns, through ten-year management contracts. On the other hand, in Ecuador, thanks to the PRAGUAS project,

---

<sup>2</sup> Drees, F., Schippner, B., Andrade, L.: “Delegating water and sanitation services to autonomous operators: Lessons learned from small municipalities in Ecuador”. WSP-BM, Lima February 2005. O. Castillo: “Modelos de provisión de servicios de agua y saneamiento en el Paraguay”, in AGUA, Sectoral Committee Bulletin, Lima, Perú, No 16, December 2003. J. Pinto, L. Arboleda. F. Ulloa: “Las PYMES de Servicios públicos”, F. Konrad Adenauer-CINSET, Colombia, August 2001.





management models involving delegation have been developed over the last fifty years, using different types of operators, such as the municipal company, users' cooperatives, municipality-user associations who manage the services by virtue of a contract with the local government.

In the pilot project experience in Peru, we shifted from a municipality in which all the functions involving supply of water and sanitation services were concentrated, with all its resultant problems, to a municipality that promoted the presence of other actors –civil society and specialized operators– sharing with them, in the form of a Public-Private-Social Alliance, the various functions involved in the supply of services, with clearly defined tasks and objectives. With the municipality retaining ownership of the infrastructure and the power to regulate local services and also determine the conditions in which the specialized operator can operate, the dilemma of privatization of services<sup>3</sup> has been resolved. This is a highly sensitive issue for the people and grassroots social organizations.

It must be pointed out that the STPP is a pilot project from which we hope to learn lessons in order to replicate it on a larger scale. The sector authorities, that is the Vice Ministry of Construction and Sanitation, can incorporate these lessons in developing a strategy for intervention in small towns. It could also be of help to Cooperation Agencies, interested in promoting sustainable investment. The STPP thus complements the activities of the National Rural Sanitation Program (PRONASAR) run by the Vice Ministry of Construction and Sanitation in 25 localities, which also seeks to establish a model of management involving Specialized Operators<sup>4</sup>.

In this context, one of the key aspects in promoting the creation of specialized operators was the adoption of clear rules for provision of services. These were established through municipal ordinances, due to the legal authority of the municipalities to do so. For the new management model, accepted by the people to be implemented, it was necessary for the municipalities to approve four municipal ordinances, thus defining a new local legal framework for provision of service with a specialized operator.

It must be highlighted that in August, 2005 the Vice Ministry of Construction and Sanitation, approved the Supreme Decree N° 016-2005-VIVIENDA, modifying the bylaws of the General Law on Sanitation Services (SD 09-95-PRES), in which it introduced a new Title to the Regulation with reference to rural areas and small towns, facilitating the entry of specialized operators, to support the municipalities in the supply of water and sanitation services. With this the STPP has contributed to provide the country's municipalities and the general public, a new management model for water and sanitation services, bringing sustainability in terms of the service and investments.

The STPP is preparing a reference manual, which will contain guidelines to support change in the management model by incorporating a social focus and an interactive CD with the tools and instruments developed during the project.

---

<sup>3</sup> Privatization is to be understood as the transfer of the State's assets.

<sup>4</sup> See: WSP-MVCS: "*Servicios sostenibles con nuevos modelos de gestión para las pequeñas ciudades del Perú: Memoria del Taller PRONASAR-STPP*". Water and Sanitation Program of the World Bank, Latin American Region; Ministry of Housing, Construction and Sanitation. Lima, January 2007, 78 pages.

# 1. Background

In the majority of the small towns in Peru<sup>5</sup>, it is the municipalities, which directly provide water and sanitation services and make all decisions on the type of service and the charges for it. Of the 644 small towns in the country (with a population of between 2,001 to 30,000 inhabitants), in 154 the water and sanitation services are managed by Water and Sanitation Companies (WSC) that are owned by the municipality and regulated by the SUNASS, while in the rest of the small towns the services are mainly provided directly by provincial or district level municipalities.

According to the results of a study carried out by the STPP<sup>6</sup>, the services managed by the local government are marked by low coverage, tariff charges<sup>7</sup> that do not allow recovery of costs, subsidies to the service within the budgetary limitations of the municipalities, inefficient operation and maintenance, deficient management, political interference, high rotation of service personnel, delay in payment of charges and unwillingness on the part of the people to pay because of the poor quality of service, as well as the municipal authority's unwillingness to charge for the service. The conclusion is that the municipalities face serious limitations in terms of efficient management of these services, unlike in the case of other services where the results are different<sup>8</sup>.

---

<sup>5</sup> The D.S. 016-2005-VIVIENDA defines small towns as settlements with populations ranging between 2001 and 30,000 inhabitants.

<sup>6</sup> HYTSA-ECSA: "Estudio sectorial de los servicios de agua y saneamiento en pequeñas localidades del Perú: Informe final." Lima, Dic. 2004. Water and Sanitation Program (WSP-LAC).

<sup>7</sup> The Supreme Decree No. 016-2005-VIVIENDA stipulates that in the small towns that do not come under the administration of an EPS, the services are charged and the municipalities fix these charges. In the small towns that are under the administration of an EPS, tariffs are charged for the service and these are regulated by SUNASS.

<sup>8</sup> See: O. Castillo and S. Ruiz. "Los servicios que brinda el municipio: ¿Por qué algunos son sostenibles y otros, no?" in: Revista AGUA, N° 19, Lima June 2005. This is the magazine of the Sectoral Concertation Committee, pp 27-39.

In response to this situation and within the framework of the decentralization process initiated in the country in the year 2002, the Vice Ministry for Construction and Sanitation, with the financial help of the Canadian International Development Agency (CIDA) and the technical assistance of the Water and Sanitation Program (WSP-LAC) launched the Small Town Pilot Project (STPP), to develop new models of management of water and sanitation services.

The basic concept of the STPP is that the municipality and the community should jointly decide to change the management model, after studying the advantages and disadvantages of the different options. That is to say this proposal was based on the demands of the interested parties. Thus, municipalities that were interested in changing the way the services were managed, were invited to participate in the Project. Fifty-six municipalities responded to the invitation and eleven<sup>9</sup> were selected on the basis of their geographical location, population size and inadequate quality and coverage of the service. The municipalities agreed in a session of the Municipal Council to develop a new management model, undertaking to promote participative mechanisms for the community to approve the proposal and take the decision to change the management model.

The towns that were included in the STPP as of December 2006 were Sechura in the Department of Piura, Laredo in La Libertad, Tamshiyacu and Nauta in Loreto, Tabalosos and Nueva Cajamarca in San Martín, Urcos in Cusco, Talavera in Apurímac and Tuman in Lambayeque.

---

<sup>9</sup> The STPP executed the project in 9 towns, as out of 11 towns three opted out: San Jerónimo along with Saylla were replaced by Nauta and the Santiago municipality was replaced by Tuman. Finally when the Ayabaca municipality dropped out, the Steering Committee of the STPP, decided not to replace it, because of the phase that the Project was in. Later in the last phase, that is 2007, Nueva Cajamarca and Urcos dropped out due to political reasons.

## 2. Services in the small towns

At the national level, the water and sanitation service supply has coverage of about 76%, with marked contrasts depending on the natural regions, urban and rural environments. Only three fourths of the population at the national level has drinking water coverage, while more than half have sanitation services. The inequality between the urban and rural areas in terms of the drinking water supply is estimated at 19 percent.

In the following table it can be observed that the population of the small towns adds up to 4.1 million inhabitants, of which 2.5 million falls under municipal administration and others, and 1.6 million fall under the administration of a municipal EPS.

**Table 1: Water and Sanitation coverage in Peru - 2004**

Segments	Service Provider	Population (millions)	Water Coverage	Sanitation Coverage
<b>URBAN</b>		19,9	81%	68%
<b>Lima-Callao</b>	SEDAPAL	8,1	89%	84%
<b>Urban in Provinces</b>	EPS	7,7	80%	64%
<b>Small Towns</b>	Municipalities and others	2,5	60%	33%
	EPS	1,6	80%	64%
<b>RURAL</b>	JASS and others	8,0	62%	30%
<b>Total</b>		27,9	76%	57%

Source: National Sanitation Program 2006-2015.



In turn the inequalities between regions in terms of coverage indicate that in the coast region, in spite of the high cost of services, only 76% of the population has water; in the Amazon jungle areas this figure is below 40% and the coverage of sewage systems is only 30%. It must be pointed out in this group of small towns, only 24% is served by a municipal EPS, as shown on Table 2.

In short a majority, that is 76% of the 644 small towns, is not covered by the EPS. These are concentrated in the highlands and Amazon jungle regions in Peru – areas with the least population. This means that the administration is exclusively done by the municipality, which owing to scarce human and financial resources, have serious limitations in terms of expanding coverage and improving the quality of water and sanitation services provided to the people.

**Table 2: Number of towns according to population range and geographical zone**

Population range	Administration	Geographical zone			
		coast	mountain	forest	Total
2,001 to 10,000 inhabitants	Municipal EPS	59	19	5	83
		32%	7%	7%	16%
	Municipalities and others	125	225	62	442
		68%	93%	93%	84%
10,001 to 20,000 inhabitants	Municipal EPS	28	11	13	52
		65%	42%	76%	60%
	Municipalities and others	15	15	4	34
		35%	58%	24%	40%
20,001 to 30,000 inhabitants	Municipal EPS	11	5	3	19
		58%	45%	100%	58%
	Municipalities and others	8	6	0	14
		42%	55%	0%	42%
Total	Municipal EPS	98	35	21	154
		40%	11%	24%	24%
	Municipalities and others	148	276	66	490
		60%	89%	76%	76%

Source: Scope and Management of the EPS. Districts Managed 2002. SUNASS and Pre-Census INEI 1999. In: ECSA and HYTSA (2004).

## 2.1. Coverage in the pilot localities

The STPP towns had the following characteristics, when the project started:

**Table 3: Coverages in Small Towns localities**

Small towns	Natural Region	Dept.	Urban Population	% Water Cov.	% Sew. Cov.	Water supply hours / day	Charge S/. Month
Tabalosos	Amazon jungle	San Martín	8,053	54%	0%	4	5.0
Nueva Cajamarca	Amazon jungle	San Martín	21,162	75%	1%	12	5.0
Tamshiyacu	Amazon jungle	Loreto	6,079	0%	0%	0	0.0
Nauta	Amazon jungle	Loreto	15,467	46%	41%	4	8.0
Urcos	Highlands	Cusco	7,000	78%	66%	6	3.0
Sechura	Coast	Piura	25,741	89%	27%	5	12.0
Laredo	Coast	La Libertad	28,296	90%	64%	5	6.0
Turnan	Coast	Lambayeque	23,524	84%	66%	4	0.0
Talavera	Highlands	Apurímac	9,023	80%	73%	6	3.5
Total			144,345	66%	38%	5	4.7

Source: PPPL-town-wise technical and social diagnostics and development plans 2004-2005. Exchange rate is of US\$ 1.00 = S/. 3.00

Formally, the coverage of water ranged between 46% and 90%, but in the majority of cases the quality and continuity was very unstable. In all cases studied the sewage network coverage was very low. Only in Urcos, Talavera, Tumán and Laredo, the sewage network covered more than one third of the houses. While in Sechura and Nauta two third of the houses were connected to a sewage network. But in Tabalosos and Nueva Cajamarca this was almost inexistent and in Tamshiyacu it was not operational. Likewise, with the exception of Sechura, in all the other cases, sewage was not treated, that is to say, this was disposed off as is into rivers and canals.

## 2.2. Charges

In the nine towns, the monthly charges that were paid were very low and in the absence of micro-measurements, these were fixed for all the users. One household paid the municipality between 3 and 12 new soles per month for water, for an average

of 5 daily hours of water service, with no guarantees of it being drinking water. The following table compares the monthly charges in effect in each town (first column), with a per capita monthly income (second column), the average number of members per household (third column) and the percentage spent on drinking water with respect to the household expenses. The result shows that the expenses on water per household were very minimal, and only in one case did it work out to 1% of the monthly family income.

In the STPP towns, in spite of the fact that the charges levied did not even cover operational costs, efficiency in terms of collection of payments was very low –although that the sum involved a very small percentage of the family income. This resulted in the service having to be sustained by the municipal income. However, the majority of the STPP municipalities did not have precise information on how much the subsidies for a service of extremely poor quality, worked out to.

**Table 4: Estimated Expense with respect to the total expense per home**

Municipality	Drinking water charges For the Home <sup>1/</sup> -A-	Per capita family income (S/. per month) <sup>2/</sup> -B-	# Av. members Per home <sup>3/</sup> -C-	% Water exp. / Total Exp. -A/(B*C)-
Talavera	3.50	186.04	4.3	0.44%
Urcos	3.00	197.25	5.8	0.26%
Nauta	8.00	166.88	6.5	0.74%
Nueva Cajamarca	5.00	181.50	5.3	0.52%
Laredo	9.50	294.55	4.8	0.67%
Tabalosos	5.00	186.07	4.3	0.63%
Tamshiyacu	0.00	186.15	5.8	0.00%
Sechura	11.90	237.82	5.0	1.00%
Turnán	0.00	300.65	4.4	0.00%

1/ The most common charge that the houses pay for the use of drinking water (and sewage services in Laredo) has been selected.

2/ According to the District-wise Human Development index 2003. UNDP (2005).

3/ Information on the Development Plans of each Municipality.

Source: UNDP (2005); Development Plans of the Municipalities.

In the small towns, the municipalities' ordinary resources do not cover their current expenditure and therefore they have to supplement it with transfers, from the Central Government, of funds originally meant for investment. The main sources of the generic transfers that the municipalities receive from the Central Government are resources from the "National Municipal Compensation Fund" (FONCOMUN) and from the different types of taxes levied for the exploitation of natural resources in their jurisdiction. Although FONCOMUN is granted on the basis of population criteria and poverty levels, income from royalty is only earned in case the municipality has natural resources that are subjected to taxes. This contributes to the fact that the municipalities in the small towns have different options to sustain their water and sanitation services. Thus for example, in the year 2004, income in the STPP towns by way of Central Government transfers was between 14 million soles in the case of Sechura and 1.9 million soles in Tabalosos.

In turn, the balance sheets in the municipal budgets showed a marked contrast between the economic balances, that is to say, the effective earnings and expenditure and the account balance. While the former was positive in all the cases studied, the account balances, that is to say, the one which takes into account depreciation, unpaid social benefits to workers and the amortization of investments, showed negative results in six of the nine municipalities in the STPP (Nauta, Urcos, Nueva Cajamarca, Talavera, Tabalosos and Tamshiyacu).

### 2.3. Investments in water and sanitation

The investments in water and sanitation made by the 9 municipalities were varied. Tabalosos had routed more than two thirds of its investment expenditure in water and sanitation services, to the construction of new reservoirs and improving mechanisms for harnessing water and widening of sewage networks. Talavera had

**Table 5: Expenditure by way of Investment in Sanitation: Year 2004**

Variables	Municipality								
	Sechura	Nauta	Urcos	Nueva Cajamarca	Talavera	Laredo	Tabalosos	Tumán	Tamshiyacu
Total Investment 2004	4,962,845	3,254,056	2,482,668	816,078	1,279,305	652,269	340,517	833,745	1,589,459
Inv. in Health and Sanitation 2004	1,298,362	895,053	327,690	174,813	705,963	9,783	231,134	369,266	124,828
% Investment in San./Total invest.	(26%)	(28%)	(13%)	(21%)	(55%)	(1%)	(68%)	(44%)	(8%)
Inv. in Sanitation 2004	955,743	534,841	285,641	169,500	604,694	9,783	227,634	145,516	124,828
% Inv. in Health and San./Total invest.	(19%)	(16%)	(12%)	(21%)	(47%)	(1%)	(67%)	(17%)	(8%)

Source: National Public Accounting, Barrantes 2005.



upgraded its water harnessing mechanisms and the primary network in order to depend less on pumping, which consumes a lot of electricity, amounting to around 50% of its investments. Other investment percentages were: Nueva Cajamarca (21%), Sechura (19%), Tumán (17%) and Nauta (16%). Finally, Urcos used 12% of its total investment for the year 2004, while Tamshiyacu allocated 8% and Laredo 1%. Given that the new management model proposed by the STPP continues to place the responsibility of financing of investments with the municipalities and the ownership of the constructed systems with the municipality again, these expenses will continue to be included in the local government's budgets.

#### 2.4. The high cost of inefficiency

In spite of the expenditure made by the municipalities on services, with the exception of Sechura and Nueva Cajamarca, no separate administrative unit had been set up for the provision of services. Thus it was very difficult for them to identify the costs of subsidizing an unstable service. As a first step, STPP worked out an estimate of costs, based on the minimum as stated by the municipal officials, but they did not include depreciation of capital in the

networks. Only the cost of personnel was calculated, including all persons associated with the supply of drinking water and sewerage services. Each municipality had a minimum number of workers engaged in providing services, for operation and maintenance or repair works. Likewise the expenses on all the products, materials and equipment required to provide the services and the costs of repairing of networks were included.

Similarly the costs involved in billing and collection of payment were also calculated, including all the costs that are normally shared with other municipal activities, for example, the use of computers and printers assigned for collection, as well as those used by the officials in-charge, were also included in this calculation<sup>10</sup>. Finally the cost of purchase of water was also included in those cases where the municipality was making this payment to the National Institute of Natural Resources –INRENA. In many cases, it was necessary to make certain assumptions in terms of attribution of costs shared with other activities of the municipalities. The clearest example of this is the estimation of the cost of printing receipts, as the Revenue Department or the Cashier Department of each municipality issues receipts for various other charges too. In the allocation of indirect costs 10% was considered for general administration.

However the cost estimate did not include the cost of replacement or depreciation of networks nor did it include the cost of expansion of services or quality upgrades. It must also be pointed out that the number of hours of supply is very low (2-6 hours in a day on an average), the quality of water distributed is not drinkable, coverage is small and only a small fraction of those who have water have sewerage services. With the exception of Sechura, no other municipality treats sewages.

<sup>10</sup> Because the users go to the municipality to pay, the same printer is used in collection of payment for various services or for collection of payment of other municipal charges. Thus the need to find out the hours utilized for invoicing and collection for the water and sewerage service charges.

**Table 6: Relative importance of each cost criterion per municipality.**

**Current Inefficiency (reduced coverage, restricted continuity, non-potable water, no sewage treatment, degradation of assets)**

Type of Cost	Municipality								
	Sechura	Nauta	Urcos	Nueva Cajamarca	Talavera	Laredo	Tabalosos	Tumán	Tamshiyacu
<b>1) Personnel Costs</b>	27%	29%	67%	44%	39%	51%	48%	83%	81%
- Operators, Technicians, others	21%	24%	42%	44%	39%	49%	48%	83%	71%
- Managers, In-charges, Heads	6%	4%	19%			2%	0%		11%
<b>2) Invoicing and Collection Costs</b>	3%	2%	20%	24%	34%	4%	15%	0%	0%
- Cashier	3%	2%	3%	18%	6%	4%	13%		
- Computers	0%	0%	0%	0%	0%	0%	0%		
- Printers and cartridges	0%	0%	0%	0%	0%	0%	0%		
- Papers	1%	0%	17%	0%	28%	0%	2%		
- Various office expenses (rent etc.)				5%					
<b>3) Cost of Products and materials for Maintenance of the Water and Sewage services</b>	54%	59%	6%	21%	14%	35%	27%	7%	11%
- Chlorine & other products	6%	35%	5%	12%	0%				
- Electricity	40%	22%			13%	19%	0%		
- Fuel	4%	1%		1%		1%	0%		
- Repair and Maintenance (Tubes)	1%		0%	7%	0%	16%	27%	7%	11%
- Microbiological testing	0%	0%	0%	0%					
- Sanitary Registration	0%								
- Communication equipment	1%			1%					
- Computers	0%		1%						
- Travel and Per Diems			0%	1%	0%				
- Clothes		0%	0%		0%				
<b>4) Cost of Purchase of Water</b>	0%	1%	4%	2%	3%	0%	0%	0%	0%
- Annual Purchase of Water		1%	4%	2%	3%				
<b>5) Rehabilitation Costs</b>	7%	1%	0%	0%	0%	1%	0%	1%	0%
- General maintenance, repair of electrical panels, Electrical pumps and valve change	7%	1%				1%	0%	1%	
<b>6) Other costs</b>	8%	9%	9%	9%	9%	9%	9%	9%	8%
- Indirect costs (10% total previous cost)	8%	9%	9%	9%	9%	9%	9%	9%	8%
<b>Total Costs</b>	534,262	378,910	70,973	118,463	142,707	453,699	38,972	4,329	33,332
	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Barrantes 2005.



The figures in the table 6 clearly demonstrate the relative importance of each cost criterion considered and the estimated cost of the inefficient supply of the current services, given in the penultimate row of the table.

Worth noting are the costs in Tamshiyacu even without providing the service and the elevated costs in Laredo and Sechura, as water is extracted from the subsoil by electrically operated pumps. Elevated costs in Nauta too stand out, although coverage is limited. Talavera was using a pumping system to pump water

to the higher areas, which made the cost of the service higher. While Tuman's reduced cost was explained by the fact that the municipality did not provide the service and the expense were borne by the sugar mill, though the service was very unstable.

### Costs per household vs. municipal income

In the following table, we can observe the total annual estimated cost, as well as the cost per population and per household with the service.

**Table 7: Costs, Per Capita Cost and Annual Cost per Household. Estimates for the Water and Sewerage Services**

Variables	Municipality								
	Sechura	Nauta	Urcos	Nueva Cajamarca	Talavera	Laredo	Tabalosos	Tumán	Tamshiyacu
Estimate Cost for Drinking Water service	534,262	378,910	70,973	118,463	142,707	453,699	38,972	4,329	33,332
Population	25,030	36,539	16,231	32,764	22,546	41,108	13,795	30,753	19,708
Per Capita Cost	21.3	10.4	4.4	3.6	6.3	11.0	2.8	0.1	1.7
Total Households with Drinking water	4,582	1,138	1,120	2,977	1,430	5,300	1,062	4,620	0
Drinking water coverage (%)	89%	49%	80%	75%	80%	90%	60%	66%	0%
Cost per household for drinking water	116.6	333.0	63.4	39.8	99.8	85.6	36.7	0.9	—

Source: CUANTO (2004), PPPL team interviews y Barrantes 2005.

When we compare the income from the charges for the service with the costs incurred by the municipality in direct administration of these services, the estimates indicate that, in three municipalities more money was being collected for the drinking water supply than the total cost of the service, that is to say a supposed surplus was being generated. However, in Tabalosos, chlorine was not being used; in Nueva Cajamarca the chlorination level was minimal (according to the reports of the National Sanitation

Direction (DIGESA), fecal coliform traces were found in 87% of the samples and no chlorine was found). In this situation of poor quality of services, limited coverage and degradation of the networks the surplus was misleading. Moreover, in several cases, it meant a direct transfer of the users of the water to the municipal budget. It is this social, technical and financial situation of the service in the nine towns studied, which led to the local government's proposal for a substantial change in the management model.


### 3. The new management model with a specialized operator

The STPP was launched in October 2003, within the framework of the Organic Law of Municipalities (May 2003), the Framework Law for Promotion of Decentralized Investment (August 2003) and the Political Constitution of the State of 1993. To design the strategy for intervention and the elements of the new

management model, a quick diagnosis and analysis of the supply and demand for new operators was made. To deal with the lack of demand and supply and to help develop the new management model, the STPP identified the following issues:

Reason for lack of demand	Elements for designing the new model
Lack of knowledge on the benefits of a specialized operator and the mechanisms of participation of the private sector (PSP).	Training of authorities and municipal officials on the advantages of having a SO in the Social-Private-Public Partnership.
Unwillingness to increase the charges to ensure full recovery of costs.	Consultation with citizens to fix the quality and price of the services to be approved by the municipality.
Lack of political will to delegate a politically sensitive service to third parties.	Decision making to hire a SO is shared between the municipality and civil society (public and users).
The district municipalities' resistance to being subordinate to the provincial municipalities.	Contracts with the SO are signed by the district municipalities in the scope of the new Organic Law of Municipalities.
Perception that the cost for promotion of private sector was elevated.	Offer of technical assistance, by international cooperation agencies, to municipalities to change the management model and development of the capacities of local professionals in order to be SOs.
Reasons for lack of offer	Elements for designing the new model
The political decision of the Government to promote the SO and PSP in small towns is not perceived.	The STPP is designed as an initiative of the Ministry of Housing, Construction and Sanitation, supported by CIDA and implemented by WSP.
Signing a long term contract with a municipality is considered high risk because of this is not a normal practice in Peru.	Use of contract modalities with lesser duration (5 to 10 years) than concession and strong participation from the community and/or users.
The municipal authorities were unwilling to increase the fees to ensure full recovery of costs.	Citizen consultations to determine the quality and price of the services, to be approved by the municipality by means of an ordinance.
The absence of a culture of payment among the people would require heavy investments in sanitary education, which the municipality would not want to incur.	Include promotion of health and hygiene, which helps in valuation of the water resource, led by the municipality and the local organizations.
The unwillingness of the people to pay more for improved quality service.	Sensitize and train the people on issues relating to the quality of service, its impact on health and its relation with the price of the service by a promotion strategy.
SUNASS cannot regulate the charges and supervise the municipality-operator contract.	Participation of civil society in determining quality-price and in supervising the contract with the Specialized Operator.
The municipalities would not be able to implement a PSP or PPP process without technical assistance at the regional or central government level.	Technical assistance to the STPP municipalities to help change the management model. Two firms were hired to provide this service in two groups of towns <sup>11</sup> .
The municipalities did not have the financial resources to follow up on the investments for expansion and upgrade of services, which the operator can be asked to do.	STPP allocates financial resources for an impact study on the quality of the service and will help the municipality to get more resources.
The legal framework that regulated the provision of water and sewage services in the small towns had legal vacuum and cross interpretation had to be done of the legal norms	Technical assistance will be offered to the municipalities to develop a stable local normative framework through ordinances that would be linked to the contracts, which would enjoy constitutional protection as a law, between the two parties.

<sup>11</sup> The firms hired were the Peruvian-Bolivian consortium CADUCEO-CAEM and the Austrian-American consortium TBW-INFRAMAN. The contract with the second consortium was concluded in advance by mutual agreement between the parties and its functions were taken over by the WSP consultant team.



Subsequently the new management model was outlined and was defined as the new local institutional arrangement to perform the main functions associated with the provision of services, which would have three key actors: the municipality, civil society and specialized private, community, or mixed operators, with their own specific roles.

### **3.1. From public management to the new model with a specialized operator**

Given the fact that the STPP was implemented in small towns where in the majority of cases the water supply and sanitation services are provided directly by the provincial and district municipalities; the change in the management model posed new challenges to the local governments promoting it.

- Strengthen the administrative capacities of the local and regional governments and as also their technical and supervisory capacities.
- Develop the qualities of participation and the capacity for social management of citizens with regard to public services.
- Propose public policies that promote decentralized specialized operator markets and their financial leverage.
- The creation and application of State resources to increase public investment in water and sanitation.

In the 80s the fiscal and financial crisis in various countries in Latin America had an impact on the predominant institutional arrangement of investment and public management and the need for reforms to promote participation of private investment in the water and sanitation sector was felt.

Thus various modalities for promotion of private participation such as privatization (understood as the sale of assets) and concession contracts for large scale services were implemented in various countries in the region, within the framework of the programs for structural adjustments and reforms. However, these modalities

had varied and dissimilar results owing to the impact of the economic and political instability in the countries. In the 90s a new institutional arrangement was developed, which was based on the lack of investment and private funding in the public services sector and the need to reduce social and political risks, manifested in Private-Public Participation (PPP).

Thus various contractual modalities of Private-Public Participation under the system of shared investment and management risks emerged. These modalities were different in terms of the degree of responsibility of the private operator, the duration, tasks and the form of payment either by the authority or the user of the service. Generically speaking there are three modalities:

- Delegated management contracts, such as concession and lease contracts.
- Infrastructure building contracts, where the client is the public authority.
- Technical assistance of an operator for management of the services, where the client is the public sector and specific competences to be developed are focused upon.

On the other hand, in local and regional segments of the population, small-scale suppliers who supplied water with similar quality standards emerged due to private initiative, at times offering the service at a lesser cost than the present service and with a greater connection with their clients and the social environment. Various studies have pointed out the benefits of the PPP model, which include major improvements in: fiscal balance in the sector, business efficiency, access to services and quality of services. However certain weak points were observed in key aspects, which warned of the need to make significant changes with the following being the most important:

- Improve distribution of the benefits by designing the contracts accordingly.
- Develop social policies to protect the most vulnerable section of the population.

- Improve the efficiency and efficacy of the regulatory framework.
- Develop mechanisms for social communication and citizen participation.

### 3.2. The new Public-Private-Social Partnership (PPSP)

From an institutional development focus, the processes of change in the water and sanitation services sector can be defined as the renewal or forging of a series of explicit social contracts or agreements, in which new rules are placed, accountability mechanisms are established, and new actors with specific roles are involved. From this perspective, the previous social agreement in the small towns established a management model where the municipality was the sole entity in charge of water and sanitation services, and all the 5 basic roles of the service were concentrated in the municipality:

- Owner of the infrastructure
- Price fixer
- Service provider
- Supervisor of the service
- Regulator of the services

However in this model, the municipalities failed to fulfill their assigned roles and this resulted in a crisis in the service, with a tendency towards political patronage and political interference. To improve water and sanitation services and guarantee sustainability, the STPP proposed a redistribution of roles between 3 local actors: the municipality, the public and a specialized operator, giving rise to a tripartite alliance, wherein:

- The municipality would continue to approve charges – given its legal status – but with the prior consent of the public and also linking it to specific quality and coverage levels.
- The municipality would continue to own the infrastructure, but the public and the specialized operator would help it in its task of expanding and upgrading systems.

- The municipality would regulate the provision of services in the town in a participatory manner, clearly establishing the rights and the duties of the users and the specialized operator.
- The public, by means of a Community Supervision Neighborhood Board, would supervise the quality of the service that the users of the service would receive.
- The specialized operator hired by the Municipality would supply the water and sanitation services.

With this new design the PPP models is now substituted by a PPSP model, where the substantial difference lies in the importance of social participation in the model, not only in terms of access to information and decision-making but also in the social supervision of the service. The PPSP model has the following advantages:

- Greater sustainability owing to the people's sense of ownership and commitment.
- Better capacity for supervision and monitoring of the quality of service by the user.
- Greater transparency in the mechanisms for accountability between actors.
- Better identification and opportunity for planning and execution of investments.
- Neutralization of political interference and patronage.
- Shared vision for development of the service for local development.
- Greater credibility and confidence in the local government and the private sector.

To implement the PPSP, it was necessary to enter into a new social agreement whereby the municipality and the public would accept and define the new rules as well as their new roles. Otherwise the new management model would not have political, social or economic sustainability. In turn, the new social



agreement must be institutionalized as a public policy of the local government, so that the undertakings of the parties and the new guidelines for action regulation the supply of the service may be consolidated in the form of rules, norms and procedures. To consolidate the new institutional arrangement or the new social pact there must be a consistent national strategy that establishes coherent guidelines for work, with a clear and precise financial policy, for the allocation of financial resources of the State.

**3.3. The promotion of specialized operators**

In Peru, there are four water and sanitation service providers: administrative boards (basically in the rural area), municipalities (in the small towns), public and municipal companies (in the medium and big cities) and two private international operators<sup>12</sup> (in medium and big cities). To encourage the municipalities in the small towns to replace the model of direct provision of services by a model of delegated provision of services, it was important to take into account the fact that there was no offer of specialized operators in Peru, therefore this market had to be developed.

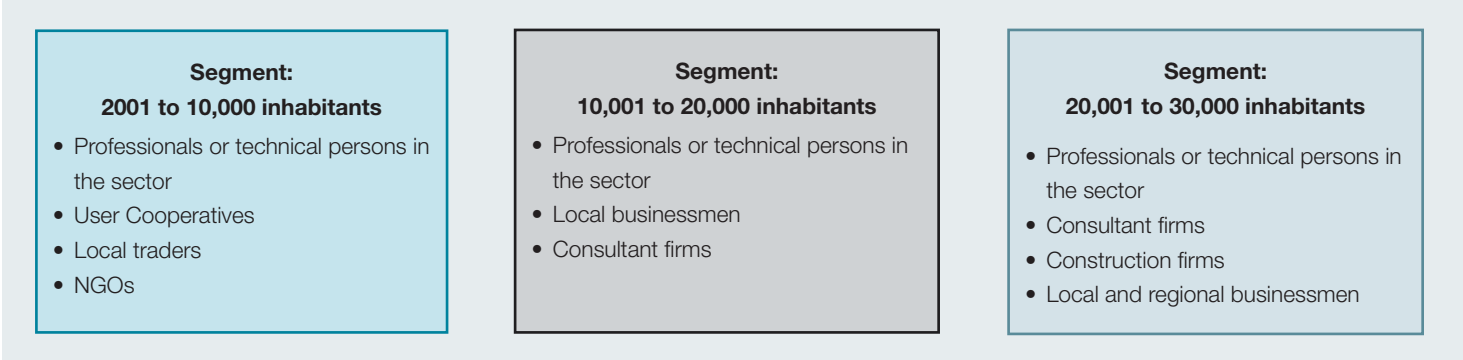
**The profile of the operators**

After analysis of the market potential of each town and the possibilities for regional expansion, the following profile of potential operators was opted for in the conceptual design of the new management model.

The specialized operator would have to be a private organization or an entity with a minority municipal participation<sup>13</sup>. The type of private organization could be any of the forms covered in the national legal frame, analyzing in each case the tax and labor related advantages in the adoption of one particular legal form, as well as the practices and customs of the particular town.

The result was that in six towns it was decided to use private specialized operators (Sechura, Tuman, Tamshiyacu, Nauta, Tabalosos and Nueva Cajamarca) and in three towns, specialized operators with municipal participation (Talavera, Urcos and Laredo) was decided upon. In these three cases a closed corporation was formed, which allows organization without a board of directors and where greater executive powers are vested in the general management. However each case is different in itself.

**Graphic 1: Potential specialized operators profile. New management model**



<sup>12</sup> An Italian-Peruvian group has a BOT contract with SEDAPAL in Lima since the year 2001 for the production of drinking water and a Peruvian-Argentinean group has just been awarded the contract to provide urban services in the Tumbes region in the year 2005.

<sup>13</sup> Peruvian legislation establishes that the creation of a municipal company should be by a law of the Congress. This is not the case for a minority municipal share in a private firm.



Summary of the profile of new operators:

- Average range of the initial company capital of the companies is between 20,000 new soles (Tamshiyacu) to 100,000 new soles (Sechura).
- In the case of the operators with social and/or neighborhood associations of users with minority participation of the municipality (Talavera and Laredo), they only contribute 51% to the social capital, while the municipality contributes 49%.
- The performance bond vary, ranging from around US\$ 6.250 in Tamshiyacu to US\$ 100.000 in Sechura.
- The charges that were being levied before the transfer varied between 3.50 new soles/household and 12.00 new soles / household.
- The charges levied, once the impact work is done and service quality improvements are transferred – taking into account an average assigned consumption of 10 m<sup>3</sup> monthly – vary between US\$ 2,53 to US\$ 4,20. Once systems are in place and micro-measurement can be done it is estimated that the billing will be done on the basis of the capacity for payment of the household and will also be linked to higher consumption of drinking water.
- The new operators are national, regional o local level technical and professional enterprises with experience in the water and

sanitation sector, in terms of the management and production process. There are two consortiums from Lima (in Sechura and Tuman), two regional groups (in Nauta and Tabalosos) and three in the town itself (Laredo, Talavera and Tamshiyacu).

The following tables show a summary of the profile of the new specialized operators. The profiles of AGUAS AMAZONICAS SAC hired to provide services in the town of Nueva Cajamarca, Rioja province, San Martin region<sup>14</sup>, SEDAUC SAC (mixed private-municipality) hired to provide services in the town of Urcos, Quispicanchi province, Cusco region<sup>15</sup> and AGUAS DE TUMAN SAC hired to provide services in the town of Tuman, Chiclayo province, Lambayeque region<sup>16</sup>, were not included because the new authorities have terminated the management contracts by mutual agreement due to various reasons.

It is important to highlight that in the case of ATALSAC and AGUALAR the respective municipalities are subsidizing operations partially covering the workers payroll, the consumption of electrical power of the wells and the rental of the office, till such time that the companies are adequately capitalized.

<sup>14</sup> In June 2007 there were acts of vandalism and strong social disturbance, with attacks on the personal integrity of the SO personnel and its property in Nueva Cajamarca. This situation resulted in a recommendation to the SO and the municipality to terminate the contract by mutual agreement. The municipality has shown interest in hiring a new specialized operator when the construction of the new drinking water treatment plant is finished and the public's expectation of an improvement in the service have been satisfied.

<sup>15</sup> In January 2007 new mayors for the period 2007-2010 were elected and the new mayor decided to end the management contract as he was against the delegation of provision of services. The SO is negotiating the rescinding of the contract and the withdrawal of the municipality from the shareholding to submit private initiatives to the other municipalities of the Cusco region who are interested in improving the quality and sustainability of the services.

<sup>16</sup> In July 2007 the municipality and the specialized operator resolved the management contract by mutual agreement given that the new municipal management considered that a management contract with a specialized operators would be more convenient for the provision for services, given that in this way the municipality would be able to subsidize the service better as in this town this service had never been charged before. The process of hiring the new specialized operator under the modality of a management contract is being drafted.

**Table 8: Specialized operators profile**

<b>Geographical location</b> Department Province District	Piura Sechura Sechura	San Martín Lamas Tabalosos
<b>Name or company name of the SO</b>	PROGESTION Consortium (SERVIUNI SAC, AGALSER SAC and PIASA Consultores S.A.). Private company	Servicios de Agua de la Amazonía SEDALAMA SAC
Place of origin of the SO and its members	Lima	Cajamarca-Celendín domiciled in Tarapoto Private operating company
Name of the legal representative	Francisco Caracciollo Rojas Espinoza	Walter Velásquez Lozano
Initial company capital	100,000 soles	25,000 soles
Performance Guarantee	100,000 American dollars	30,000 soles
Date of initiation of operations in the town	3rd April 2006	1st October 2006
User population	25,741 inhabitants	8,053 inhabitants
Average monthly household billing	12.00 soles	12.60 soles

<b>Geographical location</b> Department Province District	Loreto Loreto Nauta	Loreto Maynas Fernando Lores
<b>Name or company name of the SO</b>	Aguas del Oriente Private Limited	Aguas del Amazonas SRL
Place of origin of the SO and its members	Iquitos. Private Operating Company	Tamshiyacu (Capital of Fernando Lores). Private Company
Name of the legal representative	José Antonio Soplín Ríos	Germán Díaz Tangoa
Initial company capital	20,000 soles	20,000 soles
Performance Guarantee	50,000 soles	20,000 soles
Date of initiation of operations in the town	1st September 2007	1st October 2007
User population	15,467	6,079
Average monthly household billing for drinking water	8.00 soles	11.20 soles

<b>Geographical location</b> Department Province District	Apurímac Andahuaylas Talavera de la Reyna	La Libertad Trujillo Laredo
<b>Name or company name of the SO</b>	Aguas de Talavera SAC ATALSAC	Aguas de Laredo SAC AGUALAR
Place of origin of the SO and its members	Talavera. Mixed company formed between the "User's Association" (51%) and the municipality (49%)	Laredo. Mixed company, formed between the Neighborhood Associations (51%) and the municipality (49%)
Name of the legal representative	Natalie Marco Durand	Roberto Miñano Guzmán
Initial company capital	27,000 soles	30,000 soles
Performance Guarantee	As per evaluated inventory	As per evaluated inventory
Date of initiation of operations in the town	1st November 2006	1st June 2007
User population	9,023 inhabitants	28,296 inhabitants
Average monthly household billing for drinking water	7.68 soles	11.3 soles

### 3.4. The new institutional arrangement based on three actors

The management model is defined in the STPP as an institutional arrangement, which incorporates the dimension of sustainable development in the economic aspect, the viability of the service and the social-institutional sustainability<sup>17</sup>. Therefore in this management model, a new link between the local government, civil

society and the private sector is promoted and their roles and responsibilities are aimed at determining seven main functions on who determines the quality and the price of the service, operates the services, supervises the quality of the service, authorizes the provision of the service and establishes its conditions, is the owner of the infrastructure, funds improvement and expansion of the services and who makes the decision for change. The following table shows the actors and their roles under the current model and in the new management model.

**Table 9: Peru: Roles and actors in the water and sanitation services management model 2006.**

Roles	Current management model	New model of sustainable management
¿Who determines the quality and price of the service?	The municipality determines the price of the service without any commitment in terms of the quality to the users.	The municipality proposes the quality and the price of the service in agreement with the community, by having consultations in every colony.
¿Who operates the services?	The municipality within its multiple responsibilities and functions.	A Specialized Operator hired by the municipality. The nature and origin of the Specialized Operator is defined according to the social characteristics and the scale of each town.
¿Who supervises the quality of the service?	The municipal authorities handle the function of supervision. But they are the judge and the party and therefore the supervision becomes null and void.	The community, by the municipality's delegation of the task to a Community Neighborhood Board for Supervision of the Provision of Water and Sanitation Services.
¿Who authorizes the provision of the service and establishes the conditions for the same?	<ul style="list-style-type: none"> <li>• The Organic Law of Municipalities empowers the local governments to provide the services.</li> <li>• The new Regulation on the Water and Sanitation Law opens up other options.</li> </ul>	The municipality by means of a municipality-operator contract and the issuing of ordinances that regulate the provision of services (DS 016-2005-VIVIENDA).
¿Who is the owner of the infrastructure?	<ul style="list-style-type: none"> <li>• The municipality.</li> <li>• Although the majority of them do not have a legal physical inventory of their assets.</li> </ul>	<ul style="list-style-type: none"> <li>• The municipality.</li> <li>• The infrastructure is the municipality's property, and it is responsible for its replacement, expansion and upgrade, in consultation with or with the participation of the Specialized Operator.</li> </ul>
¿Who finances improvement and expansion of the services?	The municipality, when it has the resources to do so. Otherwise it gets donations.	<ul style="list-style-type: none"> <li>• The municipality and the users.</li> <li>• In some cases, when the socio-economic studies recommend it, the charges can finance a percentage of the investments.</li> </ul>
¿Who make decisions to change?	The municipality has the legal powers to take the decision to change the model of management.	<ul style="list-style-type: none"> <li>• The municipality consults the community on any decisions regarding changes.</li> <li>• The public decides in meetings organized in every locality.</li> </ul>

<sup>17</sup> North, Williamson's concept ( ), which refers to explicit and implicit, formal or informal agreements in order to establish certain rules of play between various actors, where the norms, functions and competences accepted by all parties involved in the economic and social development processes are established. The institutional arrangement promotes commitment and political and institutional stability for development.



In short, the new management model, based on a new “triad”, promotes efficiency, transparency and specialization of services, on the basis of a consensual agreement or a new local “social pact”<sup>18</sup>.

### 3.5. A shared decision between the municipality and the users

After carrying out studies and technical, social and economic assessments in the 9 small towns, the proposals for the new management model were designed, which were prepared with the Municipal Councils to start with and validated in workshops with local leaders and authorities. Later the proposals were widely circulated in the towns and analyzed in meetings in each locality, where the community finally took the decision to accept or reject

the change of the current management model. The proposal analyzed by the community had the following elements:

- Provision of services in charge of a specialized operator, hired by the municipality in a given time frame.
- Supervision of the quality of the services is the responsibility of Community Neighborhood Board for Supervision composed by two delegates (male and female) from each sector of the small towns.
- Quality and price (fee structure) that the specialized operator must provide and is authorized to charge, based on micro-measurement, when this is fully completed.
- Nature and origin of the specialized operator that the municipality will hire. The specialized operator can be private or mixed economy. In the second case there were various

**Table 10: Characteristics of the approved management models**

PPPL Localities	Av. Cost to LT S/.x m <sup>3</sup>	Micro measurement	Supervision	Operator	Target Water cov.	Target Sewage Cov.	Target Continuity
Tabalosos	0.89	Yes	Neigh.Council	Private Regional	90%	90%	24h/d
Nueva Cajamarca	0.59	Yes	Neigh.Council	Private Regional	85%	70%	24h/d
Tamshiyacu	0.80	Yes	Neigh.Council	Private Regional	90%	0%	18h/d
Urcos	0.50	Yes	Neigh.Council	Mixed Local <sup>1/</sup>	95%	66%	24h/d
Sechura	0.56	Yes	Neigh.Council	Private National	96%	96%	24h/d
Laredo	0.68	No	Neigh.Council	Mixed Local <sup>2/</sup>	92%	75%	24h/d
Talavera	0.43	Yes	Neigh.Council	Mixed Local <sup>3/</sup>	95%	90%	24h/d
Nauta	0.79	Yes	Neigh.Council	Private Regional	90%	86%	24h/d
Tumán	0.87	Yes	Neigh.Council	Private Regional	95%	86%	24h/d

1/ Municipality with minority participation associated with strategic partner

2/ Municipality with minority participation associated with regional investors with local preference

3/ Municipality with minority participation associated with user associations

Source: technical social studies and development plans

Drafted by: Self. Exchange Rate US\$ 1,00 = S/. 3,00

<sup>18</sup> See: WSP: “Un Nuevo acuerdo social, para cambiar el modelo de gestión y mejorar la sostenibilidad de los servicios de agua y saneamiento en pequeñas ciudades”. WSP.LAC, Lima July, 2007.

options, according to the modality of the association between the SO and the municipality.

The neighborhood assemblies took decisions on the change in the management model, in each case comparing it with the current municipal model in operation in their town. Thus in the nine towns, around 9 to 58 neighborhood meetings were held, according to the urban structure of the small town. In all the STPP localities that reached the consultation stage, the communities approved the change in the management model. The table 10 shows the characteristics of each of them.

To implement the new management models the municipality carried out the following actions, with the technical assistance of the STPP consultants:

- Approve the basic municipal ordinances to establish the legal framework required for provision of services.
- Establish the Community Neighborhood Supervision Board.
- Promote the hiring of a local or regional specialized operator.
- Transfer services to the specialized operator.

Consensus and agreements were reached more quickly on issues relating to the profile of the operator and the scope and functions



of the supervisory body. The profile of the operator in the coastal and Amazon jungle regions was direct, with a preference for local private operators, while in the highlands (Andean regions) there was a preference for mixed operators, promoting an association between the municipality and the local operator.

### 3.6. The Community Neighborhood Supervision Board (JVS)

During the consultation process held in each locality in the phase prior to promotion and implementation, the assemblies were requested to select two delegates (one male and one female) to take the decision of the locality to the assembly of delegates where the final decision on the change of the management model would be taken. In case the assembly of delegates took a decision to change the management model, the delegates would then become members, representing their town sectors, of the Community Neighborhood Board for Supervision of Public Services (JVS)<sup>19</sup>.

Once the change was decided, the assembly of delegates proceeded to determine the number of delegates who would form the directive board (usually 3 or 5 members), its gender-wise distribution (majority of men or women), the directive board would be elected and its president would be selected. This procedure was followed in eight of the nine towns. Given that in Talavera the model required the creation of a specialized operator with a municipal company and a users association, it was decided to first form and consolidate the users association. The JVS were formally instated when the municipalities issued the ordinances for creation, organization and functioning of the JVS, formalizing the appointment of its first delegates and the board.

<sup>19</sup> This new organization is framed within the scope of the Organic Law of Municipalities, Law No 27972, in its articles 40 and 116 and it is explicitly stated later in the SD 016, Chapter IV. In none of the cases does it substitute the supervisory and sanctionary powers of the municipality.



**Table 11: Various modes of consultation of users and the community**

Modality	Advantages	Disadvantages
Neighborhood wise	<ul style="list-style-type: none"> <li>• More possibility for participation</li> <li>• Ease in access to vote</li> <li>• Informed voting</li> <li>• The specific realities of each locality are known</li> <li>• Democratic and participative election of the delegates of the sector is facilitated with a gender focus</li> </ul>	<ul style="list-style-type: none"> <li>• Greater capacity for organization is required</li> <li>• The consultation process takes more time</li> </ul>
General Assembly of Representatives	<ul style="list-style-type: none"> <li>• Public and direct voting</li> <li>• Presence of social organizations</li> <li>• Visibility of participation</li> <li>• Rapidity in the process</li> </ul>	<ul style="list-style-type: none"> <li>• All the users do not participate</li> <li>• Strong leaders or dictatorships can distort the decision making process</li> <li>• Gender focus is discriminated</li> </ul>
General Assembly	<ul style="list-style-type: none"> <li>• Public and direct voting</li> </ul>	<ul style="list-style-type: none"> <li>• Only attendees participate and these need not be representatives</li> <li>• Difficult to conduct and record the number of votes when there are a large number of attendees</li> <li>• In the larger towns, mass assemblies cannot be conducted</li> </ul>

Regarding the nature and responsibilities of the supervisory body, which after the issue of the SD 016-2005-VIVIENDA, in August 2005, came to be called the “Community Neighborhood Supervision Board” consensus was quick to come regarding its formation but there was greater discussion on its responsibilities. These discussions centered on whether to monitor of the quality of the services in a general manner or in a more qualified manner with a specialized technical team. Finally the first option was chosen in order to allow access to all users without any exclusions and it was agreed that the municipality would provide the technical support.

The critical issues during the debates and consultations included the definition of the type of contract and the policy for application of charges. Regarding the type of contract the acceptance of the “Integral contract on right to use of property-management” was unanimous, with periods that did not coincide with the electoral cycle to minimize political risk to the operator, while the concession contract was rejected owing to contractual difficulties and the need for a greater capital, which the hired specialized contractor of local origin might not have.

The definition of the pricing structure was complex because of involvement of new concepts such as categories (domestic-non-domestic), subsidies (direct or cross), flat or tiered charges, minimum consumption in cubic meters, among others, which were presented in a simple manner with numerical examples for general comprehension and acceptance.

**Functions of the Community Neighborhood Supervision Board (JVS)**

As the JVS is a permanent actor in the new model, during the implementation phase it was asked to perform three basic roles:

- Provide transparency and reduce the perception of risk in the process of promotion of specialized operators.
- Execution of the communication strategy, which would be developed by the municipality and the specialized operator.
- Execution of the health and hygiene program, which would be developed under the guidance of the municipality in collaboration with the health and education sectors.

The technical consultants trained all the members of the JVS in the interpretation and application of the ordinances and the municipality-operator management contracts, as well in the knowledge and use of quality indicators and management of water and sanitation services. The methodology for training was participative. A quick assessment of the training needs and response levels was performed given the heterogeneity of the social group. This included group work, role-play and case studies. This initial training to the members of the JVS will be reinforced periodically during the STPP's follow-up phase of the local actors, guiding them mainly in the application of the abilities acquired and an evaluation of their field performance.



### 3.7. The benefits of the new model for the municipalities

The benefits that the new water and sanitation services management model offers to the municipalities are as follows:

1. Real charges can be established for the water and sanitation services, based on technical and socio-economic studies, associated with the level of quality of the service and approved by the public.
2. It frees the municipal resources that were previously used to cover the costs of operation and maintenance of the systems –subsidizing the service for those who have more and in general have access to the service– thus allowing better focus of the municipal subsidies to the benefit of those who really need it.
3. It allows determining and clearly stating quality objectives for the service, which can be demanded of the specialized operator by the municipality and by civil society.
4. Efficiency targets that the specialized operator must achieve in the management of the services are clearly established and serve as a basis for the calculation of the charges that are levied for the service. This avoids transferring of inefficiency in the management to the users and also fixing a price for a service that is more accessible for the user.
5. It allows civil society to support the municipality by monitoring the quality of service that the users receive from the specialized operator.

## 4. The new role of the municipality, the ordinances and the specialized operator

The Organic Law of Municipalities establishes that the municipalities are responsible for the regulation of the provision of public services in their jurisdiction, for which a key step in the process was to create the normative framework for provision of services in the towns. To regulate the provision of services, the municipalities approved four ordinances: Ordinance on Provision of Services, on the Community Neighborhood Supervision Board, on Attending Claims and on the System of Pricing and Charges.

**i. Ordinance on Provision of Services.** This ordinance regulates the rights and duties of the specialized operator and the users of the service. This is based on the General Law on Sanitation Services and its bylaws and takes as a reference the regulations approved by SUNASS for municipal EPS. However it required more time for approval by the Municipal Councils, due to its size and the technical nature of the content.

**ii. Ordinance on the Community Neighborhood Supervision Board.** This ordinance creates the JVS, establishes the functions of the municipality and regulates its functioning. The functions were debated in workshops with the delegates from all the sectors of the locality and the participation of the municipal officials and authorities. In this way the proposal submitted to the Municipal Council was quickly approved. The key topic of discussion was the type of functions that the municipality would delegate to the JVS, given that this would directly affect the profile of the delegates of the locality and in the organization of the JVS, and there could be a need for a technical office with the allocation of resources for its operations.

**iii. Ordinance on Attending to Claims.** It establishes the procedures and time frames to attend to commercial and operational claims, in first and second instance. Although it is clear that the municipality has regulatory powers as a second instance, the first instance being the specialized operator, the JVS has the function of giving its opinions on the resolutions of the municipality as its role is that of a social supervisor of the services supply.

**iv. Ordinance on the System of Pricing and Charges.** This regulates the application of charges, which are agreed upon by the community, and fixes the maximum price for collateral services that the specialized operator can charge.

There was more debate on the system of pricing and charges in the Municipal Councils, given that the municipality had to work out a policy for cross-subsidies and this had to be done step-by-step. The main issues for debate on the pricing system were:

- From when will the new charges be applied? (Immediately, when the specialized operator comes in or when the services improve)
- Who, how and for how long will a user have right to discounted social charge?
- At what point of time will inflation adjustments be applied on the charges and prices? What inflation indexes will be used for the adjustment?
- Will the actual cost of the household connection be charged or will it be one fee for all connections? If it is a fee, who will finance the rest of the cost of the connection?
- Will any institution be exempt from payment for the services? (Churches, hospices or others)
- What will be the sanctions provided for in the ordinance, for infractions by users and the specialized operator? Will the sanctions be dissuasive or reparatory in nature? What will be the degree of pecuniary fines?
- A user who has a home-based business will pay a domestic fee or a commercial fee?
- Will any specific rates be included in the billing to cover specific issues? (JVS, hygiene and health program, environmental protection, solidarity etc.)

### 4.1. The municipality and the promotion of operators

The municipalities were briefed on the profile of the operator and the documents for the tender (procedures, contract, studies

and ordinances) to identify potential bidders. During the promotion, there were various meetings with businessmen and entrepreneurs (local and regional) from sectors similar to the water and sanitation services (contractors, project planners and suppliers), who in some cases purchased the terms and conditions document of the bid. The groups that participated as bidders in the bidding process came from:

- Municipal departments of the water and sanitation services
- Municipal EPS from the region
- Sub-contractors of the municipal EPS
- Administrative boards of the rural water and sanitation services

From the time of the announcement till the receipt of proposals, an average of three meetings were held with potential bidders.

**First meeting.** On the first three days after the announcement was made. The purpose of the meeting was to make the public interested in the purchase of the bidding terms and conditions. Attendance to the meeting was free and by personal invitation, with the participation of the Community Neighborhood Supervision Board to provide social support to the process and reduce the social perception of risk with regard to the change.

**Second meeting.** This was held three days before the deadline for formulation of any queries. The purpose was to explain the content of the tender documents. This was done with the people who had purchased the bidding terms and conditions as well as invitees (potential bidders), keeping in mind that buying the terms and conditions does not necessarily suppose that they have read them or understood them in their entirety. The issues dealt with were: i) Explanation of the business plan ii) Definition of the requisites to participate in the bid iii) Explanation of the selection procedure iv) Explanation of the contract and its annexes. The queries made by the partici-

pants were taken into consideration at the time of sending the circular with the responses to the queries and the integration of the bidding terms and conditions to the process.

**Third meeting.** The third meeting was held, on an average, three days before the date for submission of proposals. The purpose was to provide technical assistance for filling up the proposal form and also to instill confidence in the bidders.

## 4.2. Criteria and procedures for selection

Considering that at the beginning of the STPP project in Peru there were no experiences of having specialized operators in the water and sanitation services sector, it was decided to establish certain minimum criteria to start the process of selection of bidders, such as:

- They must be familiar with the provision of public services.
- They must have a minimum financial capability to cover the working capital requirement and small short term credits.





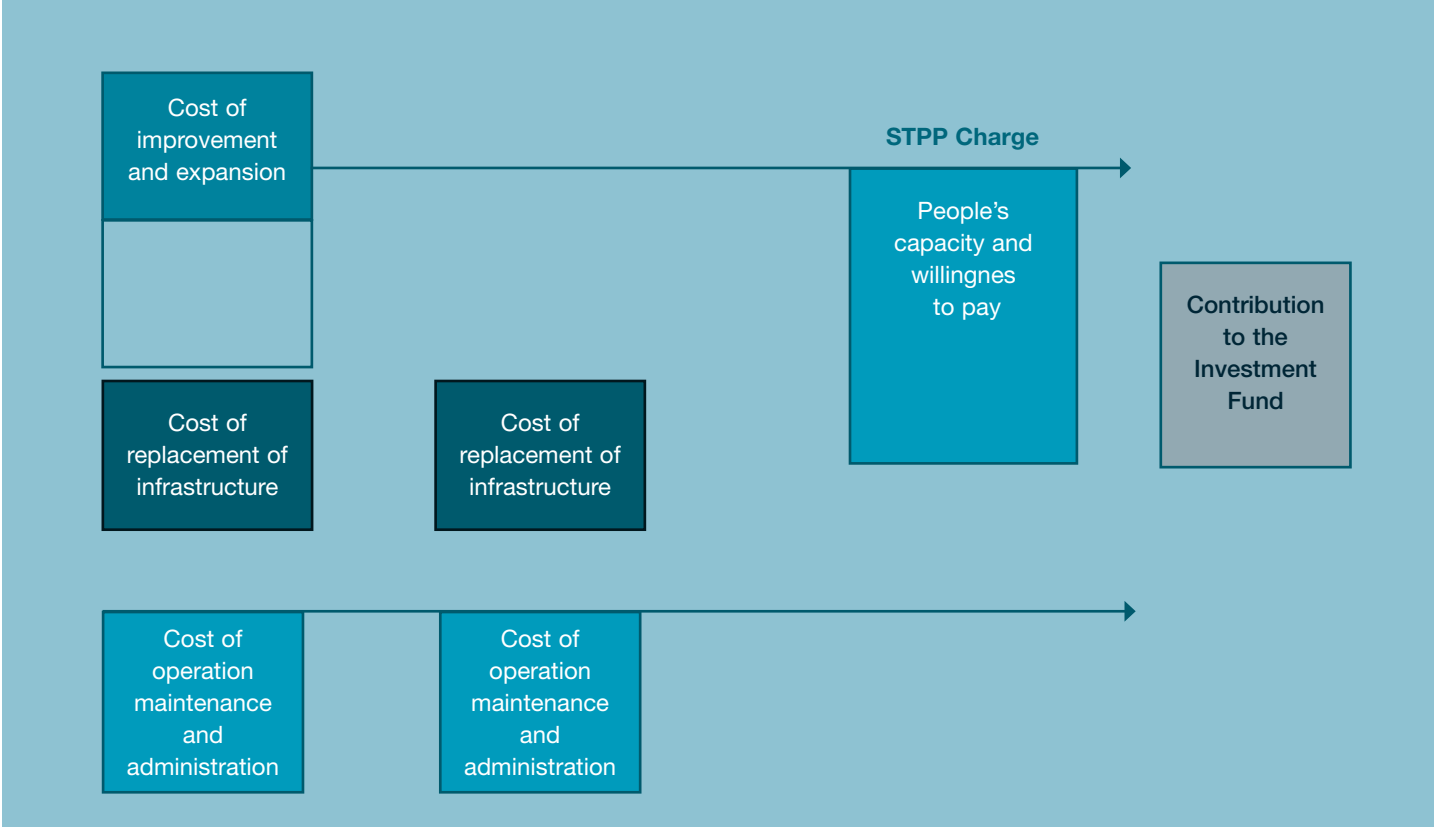
- They must be persons with moral solvency who comply the requisite of origin (local or regional depending on the case).

In the case of two or more bidders satisfying the selection criteria, it was concluded that the only factor of competence must be the percentage of the turnover or collection that they would offer to contribute to the Investment Fund, as this is more transparent and easy to apply locally. It was also observed that the time frame for the bidders to prepare their proposals must be taken into account and also the time frame demanded by them to establish ties between technicians and entrepreneurial.

### 4.3. The charges and the poorest section

The following diagram shows the elements of the conventional charges that include the cost of improvement and expansion of systems that, compared with the STPP charges based only on operation and maintenance costs and infrastructure replacement costs, and compared with the capacity levels and willingness of the people to pay, makes the creation of an investment fund possible.

Graphic 2: Conventional Charge



Additional resources to meet the requirements for systems improvement and expansion will be funded through municipal resources, donations, transfers and by the new users.

**Criteria for eligibility to discounted social charges:  
Direct subsidy to the poorest**

Access to sufficient, safe, acceptable, accessible and affordable water for life is a recognized human right that applies to all human groups without exclusion. But it is the poorest that have the most unstable conditions of access, which pay for the most expensive services, as they are not covered by the supply network. This leads to an inverse relation between price and capacity for payment, which is in detriment of their productive capacity and their welfare.

Thus in the pilot project, efficient management of services and attention to the poorest was a special challenge for the municipality, the specialized operator and the JVS, as it proposed a new way of approaching the issue by jointly deciding on the criteria, ensuring the sustainability of the operating entity and at the same time guaranteeing the human right to drinking water for the poorest of families. This was to ensure identification of the “poor user” by taking into consideration economic and social variables. The definition makes a comparison between the actual living conditions of the people and those conditions that place them above or below the poverty line.

In this framework, the criteria to identify the poorest of families would be as follows:

- Single-parent household or homes where one of the parents is unable to work.
- Households whose total expense is below the value of a basic food basket or an extreme poverty line. Based on socio-economical studies done in the towns in the extreme poverty group, the per capita cost or the monthly expense per person

fluctuates between 40 new soles in the rural Amazon jungle and 55 new soles in its urban area.

- In order to prioritize the following will be kept in mind: households with at least one child between 6 to 12 years, with persons older than 70 years of age, with disabled persons or persons with serious illness requiring long term treatment and chronic illnesses; high levels of economic dependency; with 4 or more persons for each employed member or no employed members.
- Households whose basic needs aren't met:
  - Improvised housing in a place that is not meant for human inhabitation.
  - Pile housings: population in households with more than 3, 4 members per room.
  - Homes without hygiene services.
  - Households without any comfort index (they do not have: electricity, television, radio, furniture, gas stove, motorcycles, cell phones, nor have they got any credits).







**Social cases**

On the other hand the proposal also identified those termed as “social cases” which included users in a situation of vulnerability (destruction due to fire or earthquakes). Although these cases do not necessarily fulfill the abovementioned criteria, they may still be levied a “social charge for water” in view of their situation, for a given period of time. Orphanages, free dining halls, ‘glass of milk’ and ‘wawawasi’ schemes, whenever they are able to prove their inability to pay are also eligible. In the STPP these criteria were validated in the JVS meetings, in the presence of officials and specialized operators in the towns of Tabalosos, Nauta and Tamshiyacu.

**Procedure to identify users who are eligible for the discounted social charge for water**

The municipality, the JVS and the specialized operator jointly decide on the number of users who are eligible for the discounted social charge for water, which will be at 50% of the value of the normal charges for the service. The specialized operator will make a prior calculation to prevent the number or percentage of users resulting in an imbalance in terms of its administration and if such

is the case, this difference will be compensated by contributions from the municipality, directly subsidizing the poor.

The municipality (1), the JVS (2) and the specialized operator (1) will set up an evaluation committee, who will receive applications for social charges for water. The evaluation committee will study the applications and will decide on the eligibility, based on the criteria defined.

Once the municipality receives the recommendations of the committee, it approves them by a Municipal Resolution and sends the list of beneficiaries to the specialized operator, indicating the minimum cubic meters that this family can get under the discounted social water charges, which can range between eight to twelve cubic meters, depending on the area. Once these quantities are exhausted, in areas where there is micro-measurement, the user will have to pay the difference. The beneficiary will sign a sworn declaration that the data submitted to the evaluation committee is true. If the data submitted is false, he will immediately lose the benefit. Later the specialized operator will assign the benefit according to the official list of the municipality.

## 5. Characteristics of the contracts of the new specialized operator

The STPP designed a single contract format under the generic denomination “management contract” to transfer different risks to the specialized operator according to the circumstances. After evaluating the situation of the services in the towns and their demand for investments, the financial capacities of the municipalities, the availability of non-refundable resources for the sector and the financial possibilities of the potential operators and on the other hand given the risk perception of the potential operators and the lack of experience in municipality in terms of long term contracts, it was concluded that it would not be appropriate to demand that the future operators should assume the risk of investment in replacement, improvement and expansion works. Thus it was decided that the following risks would be transferred to the operator:

- Operation and maintenance risk
- Commercial risk
- Working capital and minor investment risk

It was established that the risk perception of potential operators and the lack of municipal experience in the administration of very long duration contracts would make it impossible to ask them to assume the risk of investment in replacements, upgrades and expansion works. Considering that the average charge was



fixed by taking into account the average long term cost with and without investment, it was decided to set up an Investment Fund, which would be managed by the municipality and the operator, under the supervision of the JVS, which would be created by the contribution of a percentage of the turnover of the operator.

Additional resources to meet the requirement for improvement and expansion would be funded by municipal resources, donations, transfers and by the new users.

In general terms, the municipality-specialized operator contracts will have duration of 7 to 10 years. The contract guarantees were established taking into account the financial capacity to be demanded of the potential operators, the instruments utilized in the town and permitted by the Peruvian Civil Code and keeping in mind the requirement to have insurance policies for the vulnerable assets and third-party damages. In some cases a transition period of 120 days was agreed upon, during which the operator would gradually take charge of all the functions related to provision of the services. This system was designed to help the specialized operator till the completion of at least two cycles of supply-billing-collection and this was proposed in the case of the following ombined situations:

- The infrastructure works to guarantee a perceptible improvement in the quality standards in the provision of service had not been completed.
- Towns where people had a long tradition of free supply of service, managed by production cooperatives.
- There was no process for recovery of the municipality's receivable account.
- The municipality was subsidizing at least 70% of the cost of the service.
- In cases of operators whose shareholder composition was on a social basis, with a need to raise the capacity for professional management of services.

- The technical capabilities of the operator had been given preference over its financial capability at the time of selection.

### 5.1. Legal basis of the Municipality-SO contracts

The management contracts signed between the municipalities and the specialized operators are based on the following legal instruments:

- Political Constitution of the State
- Organic Law of Municipalities
- Framework law on promotion of decentralized investment
- General Law on Sanitation Services and its bylaws
- Civil Code in effect

### 5.2. Contract guarantees

The law establishes the need for guarantees for the public assets that are handed over to the private sector. In a private investment promotion process, the following guarantees are normally provided:

- Bid bond
- Performance Bond with the contract
- Guarantee on the state of conservation and integrity of the assets handed over
- Guarantee of third-party damages

These guarantees are normally provided in the form of a surety bond or insurance policies, which supposes that the bidders have access to these instruments.

In the STPP, the contract guarantees were established taking into consideration the financial capacity that could be demanded of the potential operators, the instruments normally used in the town and permitted by the Peruvian Civil Code and keeping in mind the requirement to have insurance policies for vulnerable assets and third-party damages.

What was most difficult in designing the contract was the establishment of a system of contract guarantees, which would make sense at the local level (given the objective profile of the SO) and the cost of maintenance of which would not have a significant impact on the charges that the users would pay.

Even if the initial tendency is to resort to the mechanism of surety bonds and insurance policies for Performance Bond, the local reality shows that local and regional professionals, technical persons and businessmen do not follow this practice as the size of the local market for 2.001 to 20.000 inhabitants is not large enough to attract the attention of those contract firms, which could provide these guarantees. This resulted in the establishment of other types of guarantees provided for in the Civil Code in effect, which although not immediately realizable, do have the required dissuasive character.

The amounts of the guarantees also had to be fixed according to the local reality, overcoming the natural tendency to fix the same on the basis of the value of the systems handed over for the operation of services. When the value of a house located in the main square of the town does not exceed 10,000 soles and the annual turnover for the service does not exceed 200,000 soles, it does not make sense to provide a Performance Bond of the contract, which is greater than 10,000 soles.

The purpose of the Performance Bond of the contract is to cover the working capital needs in the eventuality that the municipality would have to temporarily take on the responsibility of provision of service, in case of a possible deflection by the specialized operator, as it does not have the budgetary resources for the same. In these cases, to safeguard the continuity of the service, it is expected that the guarantee would be immediately realizable (converted into cash to cover the expenses linked to the provision of the service). Given that

the use of collateral was being allowed, one had to then consider a mechanism to provide for these contingency resources. With this objective – among others – the existence of an Investment Fund was designed, which was created from a percentage of the turnover of the specialized operator. It was expected to have sufficient resources to cover these contingencies from the second year of the management contract onwards.

### 5.3. Adapting selection criteria to local conditions

In the Tamshiyacu and Tabalosos towns, in spite of having sold a considerable number of tender documents for the selection process of the SO, the processes had to be declared as deserted. This situation forced WSP staff to evaluate the technical assistance given to these towns. It was found that there were certain barriers in terms of access, which were making the participation of potential bidders impossible, as per the defined profile.

For the second announcement, the following modification of criteria was recommended to the technical consultancy firms:

- Reduce the amount of the guarantee of Bid bond and Performance Bond of contract.
- Substitute the competence factor related to the technical proposals for improvement of service by general and technical solvency of the team presented by the bidder in the water and sanitation sector.
- Consider the economic factor of contribution to the Investment Fund as a defining competence factor, once the minimum required levels of administrative and technical solvency are met.
- Award a margin of preference to the local bidder, allocating additional points to it in the evaluation of proposals.
- Modify the process of opening and evaluation of offers, considering a method of two envelopes, the first with the technical and economic details of the bidders and the second with the economic offer.

With this the entry, the barriers that were identified in the process of the first bid in Tamshiyacu and Tabalosos were overcome.

One issue that merits special attention is the time frame given to bidders to prepare their offers as in general the time frame is not governed by the drafting or physical obtaining of documents, but the time taken to make alliances with the technical persons and financiers.

### 5.4. Rights of the specialized operator

The rights of the specialized operators are provided for in the following instruments:

1. Management Contract where their legal, technical, administrative and economic rights are established, with regard to the provision of services, the manner and mechanisms for readjustment of charges and prices and indemnities in case of unilateral resolution of the contract without any specific reasons established in the contracts.
2. Ordinance on provision of services, which is an integral part of the management contract, and where the rights and duties of the specialized operator and of the users in terms of the service are established.
3. Ordinance on charges and pricing, which is an integral part of the management contract, where the economic conditions for provision of services and collateral services are established.
4. Development plan of the services, which is an integral part of the management contract and where the investment commitments of the municipalities are established and the quality, coverage and management objectives that are the exclusive responsibility of the specialized operator and those that are subject to investment by the municipality are established.

**Table 12: Characteristics of the management contract between the Sechura municipality and the specialized operator “PROGESTION”**

<b>Size of the town</b>	<p>Provincial Municipality of Sechura. Capital City: Sechura.</p> <ul style="list-style-type: none"> <li>• Estimate Population: 27,000 inhabitants.</li> <li>• Number of connections: 5,000.</li> <li>• Average monthly invoicing of 12.00 soles, only water.</li> <li>• Average monthly billing of 5.60 soles, water and sewerage.</li> </ul>
<b>Name of the operator</b>	<p>PROGESTION Consortium, constituted by the companies SERVIUNI SAC, AGALSER SAC and PIASA Consultores SA. Represented by Francisco Caraciolo R.</p>
<b>Date of signing of the contract with the municipality and duration</b>	<ul style="list-style-type: none"> <li>• It was signed on the 26th of November 2005.</li> <li>• For ten years, after transfer of services to the SO</li> </ul>
<b>Date of initiation of operations of the SO</b>	5th April 2006
<b>Object of the contract</b>	<p>The municipality transfers the use and enjoyment of the movable and immovable assets that on the whole form the infrastructure of the system of provision of water and sewage services of the city of Sechura and the fishing villages in the Sechura-Parachique stretch.</p>
<b>Operator’s initial contribution to the social capital</b>	S/. 100, 000 (One hundred thousand soles)
<b>Investment, expansion and emergency fund</b>	<p>This will be constituted by 10.2% of the monthly turnover without VAT (Value Added Tax) The SO will make a quarterly contribution, which will be managed by the municipality. The use of the fund in emergency cases will be authorized by the municipality.</p>
<b>Economic system of the contract</b>	<p>The income collected monthly will be used for:</p> <ul style="list-style-type: none"> <li>• Payment of the payroll of all the workers.</li> <li>• Provisions and reserves.</li> <li>• Costs and expenses of the production, storage and distribution systems of the drinking water and sewage services.</li> <li>• General administrative and maintenance costs and expenses</li> <li>• Payment of taxes, contributions and fees.</li> <li>• Payment of guarantees that the SO must provide to the municipality.</li> <li>• Amortization of credits by way of investments and expenses.</li> <li>• The Operator is not authorized to obtain credits by offering the transferred assets as guarantee.</li> </ul>
<b>Obligations of the specialized operator</b>	<ul style="list-style-type: none"> <li>• Provide services in an efficient manner, based on the charges approved by the municipality.</li> <li>• Submit the annual Operation Plan to the municipality.</li> <li>• Make investments, under the municipality’s supervision for the expansion and upgrade of systems.</li> <li>• Upon termination of the contract, return all the transferred assets, with the new investments and upgrades to the municipality.</li> </ul>

## 6. The creation of a market for specialized operators

As known, a market is the place where offer meets demand and a transaction is produced. A market does not exist when there is no offer or demand, or if the transaction is not executed due to its high cost. When the Small Town Pilot Project –STPP proposed a change in the municipal management model of the water and sanitation services, to one where the management would be delegated to third parties, one issue had to be dealt with– there was no demand for this service in the municipalities and there was no offer from the private sector. This absence of demand and offer, that is to say the non-existence of a market, presented the challenge of inducing and promoting the creation of the said market.

For this an analysis was made of the lack of demand and offer and the guidelines for new models of management of water and sanitation services were established, wherein the risks perceived by local governments and local investors were addressed. This process was described in the previous points.

### 6.1. Factors that influenced the lack of demand

In the General Law on Sanitation Services, Law 26338, it is stated that in the urban area the provision of services is the responsibility of supplier entities (in a broad sense), which may be public, private or mixed entities<sup>20</sup>. In turn, the Supreme Decree N° 09-1995-PRES, which regulated the abovementioned law, indicates that the provision of services in the urban area<sup>21</sup> is through public, private or mixed Service Provider Entities (EPS), thus limiting the broad concept of supplier entity as stated in the Law.

---

<sup>20</sup> According to the Law on Business Activities of the State, a mixed company is one wherein the State has the power to decide; if its share is minority then it is not considered a mixed company but a private company with State participation.

<sup>21</sup> The Supreme Decree No. 015-95-PRES establishes that the urban area includes towns with more than 2000 inhabitants.

Given this scenario, the urban towns that did not come under a municipal EPS (more than 75% of the small towns) and which did not incorporate an EPS, had an informal provision of water and sanitation services. The cost of this informality was that the majority of them did not have access to the resources of FONAVI<sup>22</sup> to expand its services and that the charges were maintained at levels way below recovery of costs. With respect to the legislation, which promoted participation of the private sector, in the Supreme Decree No. 059-96-PCM that approved the “Single Revised Text of the Norms with the status of a law that regulates the concession to the private sector of public infrastructure works and public services”; indicated for the first time that the municipalities had the powers to award the concession of its public services; but prior to this the Law 26338 had established that the provincial municipality was entitled to the right to exploitation, therefore a district municipality would have to coordinate with the provincial authority, if it decided to give the public services of its town in franchise.

Recently in the year 2003, the new Organic Law of Municipalities was promulgated (Law 27972), which approved the responsibility of the municipalities in the provision of public services, but without differentiating between provincial and district level, and in this year itself the Framework Law for Promotion of Decentralized Investment (Law 28059) was approved, indicating that the municipalities can establish any modality of participation of the private sector. Finally in the year 2005 the Supreme Decree N° 016-2005-VIVIENDA clarified that in small towns the provision of water and sanitation service can be under a Specialized Operator, defined as a private organization, hired by a municipality under any form of contract allowed by the law.

---

<sup>22</sup> National Housing Fund, which during the 90s was the main source of financing for extension of coverage of sanitation services in the urban area.



In short, it can be said that in spite of the fact that since the year 1994, in which the General Law on Sanitation Services was promulgated and the participation of private organizations in the provision of water and sanitation services is now legally viable, this did not happen because of the following factors:

- Confusing legal framework with respect to the possibilities of the small town municipalities to hire specialized operators, which was recently clarified in the provisions issued in the year 2003 and 2005.
- Lack of information and/or knowledge of local governments about the benefits and the mechanisms of participation of private operators or other alternate management models.
- Unwillingness of the municipal authorities to raise the charges to a level, which allows full recovery of costs.
- Absence of information on the advantages of delegating a public service that is politically sensitive to third parties, by means of a contract.
- Lack of information and confidence on the part of the district municipalities to be subordinate to provincial municipalities (for the award) of an issue that they considered to be exclusively local.

- Perception that the cost of promotion of private investment was very high given the comparison with the Proinversion expenses<sup>23</sup>.

## 6.2. Factors that influenced the lack of supply

When the legal norms make possible the participation of the private sector in public services, in general the private initiative evaluates the possibilities of creating demand. But in the previous decade, there were no such favorable conditions, because:

- In the period 1996-2003 there was no political decision of the Government to promote PSP in sanitation in the small towns.
- For those interested in being specialized operators, international technical cooperation could be obtained on account of promotion of PSP and PPP, but they considered that signing a long-term contract with a municipality was high risk, given the absence of this practice in Peru.
- They were of the opinion that the municipal authorities would never fix the charges at the level of full recover of costs, as the increase in charges would be politically unpopular.
- Absence of a culture of payment in the people would require high investments in sanitary education and they were of the opinion that the municipality would not support them in this process.
- Unwillingness of the people to pay more for improved quality of service, given their ignorance of the service quality factor and/or a sense of resignation about the poor service that they receive but do not pay for.
- The fact that SUNASS is an entity located in Lima would make it impossible for it to regulate the charges and supervise the contract between the municipality and the operator.

<sup>23</sup> Central Government Agency in charge of promoting participation of the private sector in the State companies and projects.

- The municipalities cannot execute a PSP or PPP process without the support and technical assistance of a certain level by the regional or central government, given the costs in promotion of the participation of the private sector.
- The municipalities did not have the financial resources to support investments in expansion and improvement of services and since it did not have the support of the Central Government, they would not be able to get resources.
- The legal framework that regulated the provision of water and sewage services in small towns had normative gaps and it was necessary to make cross interpretation of the legal norms, which increased the risk of operations vis-à-vis the banks and insurance companies.

### 6.3. The success of the STPP and its scaling up

For a market to exist, it is not enough if there is demand and supply. It is in fact necessary that a transaction must take place and this will only occur if the costs of the transaction are reasonable in terms of the scale of operation that is going to be carried out.

From this perspective, the STPP has been a success, because as a pilot project it has made contributions to the knowledge in this sector on the promotion and hiring of Specialized Operators, in an environment where never before had such a process, based on Public-Private-Social Partnerships, been attempted. The success in the learning is a result of a process in which studies have been done and instruments developed, which were subsequently validated. Therefore it can be stated today that the cost of the transaction is within the reach of any municipality, with the support of a development NGO, since now we have the:

- Supreme Decree No. 016-2005-VIVIENDA, which substantially modifies the regulation of the General Law of Sanitation Services and in which the provision of services in small towns is regulated,

under a system that is different from the one applicable to medium-sized and big cities. This provides a solid legal backing to the institutional arrangement of the STPP.

- A validated version of the reference manual of the processes of change of the management model of the water and sanitation services in small towns that contains the guidelines to support these processes. This is in the draft stage and would be of help in the replication of the process in other municipalities, with the technical assistance of entities associated with the STPP, which make use of local consultants.
- A set of lessons and experiences shared with the project “National Rural Sanitation Program” (PRONASAR)<sup>24</sup> and an International Seminar with the authorities in the sector, held in the beginning of February 2007, in Lima, in which the experiences contributing to the promotion of the market of specialized operators were identified.

It is expected that with these documents that summarize the achievements and challenges for changing the model of management of services; with a single policy for the sector and a single financial policy, which is defined as the tool to support the process of change, by the central government, this change in the management model can be replicated on a large scale and a consolidated market of Specialized Operators of water and sanitation services for small towns in Peru can be created.

### 6.4. Entrepreneurs and pioneers

The STPP in Peru has created an initial group of specialized operators for water and sanitation services for small towns,

---

<sup>24</sup> See: WSP: “Servicios sostenibles con nuevos modelos de gestión para las pequeñas ciudades del Perú. Memoria del Taller PRONASAR-STPP”, Ministry of Housing, Construction and Sanitation; WSP LAC, Lima January 2007, 78 pages.



which is formed by six private operators (Tamshiyacu, Nauta, Nueva Cajamarca, Tabalosos, Sechura and Tuman) and three mixed operators with municipal participation (Urcos, Talavera and Laredo). The new SOs are:

- AGUAS DEL AMAZONAS SAC hired to provide services in the town of Tamshiyacu, Maynas province, Loreto region.
- AGUAS DEL ORIENTE SAC hired to provide services in the town of Nauta, Loreto province, Loreto region.
- SEDALAMA SAC hired to provide services in Tabalosos town, Lamas province, San Martin region.
- AGUAS AMAZONICAS SAC hired to provide services in Nueva Cajamarca town, Rioja province, San Martin region<sup>25</sup>.
- ATALSAC (mixed community-municipality) hired to provide services in Talavera town, Andahuaylas province, Apurimac region.
- SEDAQU SAC (mixed private-municipality) hired to provide services in the town of Urcos, Quispicanchi province, Cusco region<sup>26</sup>.
- PROGESTION SAC hired to provide services in Sechura town, Sechura province, Piura region.
- AGUAS DE TUMAN SAC hired to provide services in Tuman town, Chiclayo province, Lambayeque<sup>27</sup>.
- AGUALAR SAC (mixed community-municipality) hired to provide services in Laredo town, Trujillo province, La Libertad region.

<sup>25</sup> See footnote N° 14.

<sup>26</sup> See footnote N° 15.

<sup>27</sup> See footnote N° 16.

It is expected that these specialized operators, trained by the STPP, can in the medium term, expand their operations to other small towns, considering that the Peruvian legislation allows submission of private initiatives and that the modifications to the regulation on the General Law on Sanitation Services state that the supply of services in small towns should be done mainly by specialized operators.

In those cases in which the public decided to have a specialized operator with municipal participation, to allow the initiation of local participation, a business format was established with the participation of potential local shareholders. In three towns it was decided that the specialized operators would have municipal participation (Talavera, Urcos and Laredo), by creating a Closed Corporation (SAC). However the three cases are different from each other on account of the following:

- In Talavera the operating entity was constituted by forming a company between the Association of Users of the town (51% of the shares of the SO) and the municipality (49% of the shares of the SO).



- In Urcos, the operating company is the result of an association between a strategic partner who is familiar with the water and sanitation services (75%) and the municipality (25%), with the strategic partner taking on the commitment to offer 20% of its shares to civil society organizations of the town, after the first year of operations.
- In Laredo, the operating company has been established as a share capital company, where the municipality has a 49% of the shares and neighborhood associations have a 51% share. Since there is no strategic partner linked to the provision of services, in Laredo, the capital of the operating company is considerably greater than in the other two cases.



# 7. Difficulties in the STPP pilot project processes



There were various types of difficulties that were faced in the implementation of the STPP with regard to the member municipalities in the project and also the intervention process with the two technical assistance firms. The problems can be summarized in the following groups: pertaining to the supply of operators, political and social in nature, communication related and regarding expectations in terms of infrastructure and transfer of services.

## 7.1. Lack of a specialized operator market

One of the main problems was the pioneering nature of the creation of a market of specialized operators with local and or regional characteristics. The absence of local operating companies or professionals interested in entering the operator market was one of the initial limitations of the project. This situation became more complicated when in some towns the change in model was accepted but at the same time it was demanded that the operator hired should be local or regional. This limitation was overcome by an induction strategy, according to the conditions of each town, with actions for promotion by the municipality and a direct communication strategy with the parties interested in becoming operators.

## 7.2. Political and social problems

These were the most challenging problems, especially in the first year, given that in the majority of the people there was a strong sentiment of rejection of “privatization”. Political opposition groups in the 11 initial small towns took advantage of this situation to challenge the mayors and the municipal councils. The project developed a special strategy for communication and promotion to explain to the users the differences between “privatization” and the hiring of a specialized operator to make the services more professional, guaranteeing that the ownership of the assets would be maintained with the local government. The activity of

the opposition groups resulted in the postponement, on three occasions, of the selection process of the Specialized Operator in Laredo.

However, political interference could not be overcome in two towns, which led to them withdrawing. Santiago in the Ica region and Ayabaca in the Piura region withdrew after 8 months of intervention. In these towns the political opposition groups mobilized some grass-root organizations creating an environment of social hostility more against the mayor than against the Project as such. But the final decision was the withdrawal of the municipalities from the Project. On the other hand the municipalities of San Jerónimo and Saylla withdrew because they had an undertaking with an NGO, for more financial support for other activities in their town.

However the most difficult test in this process occurred during the process of national and regional elections held in 2006 and subsequently the taking over of the new municipal management. Thus those who had actually implemented the process for selection and hiring of specialized operators moved from office.



This change in authority in the beginning of 2007 directly affected the processes in the towns of Urcos (Cusco), Nueva Cajamarca (San Martín) and in Tuman (Lambayeque). In these three cases, the new municipal authorities were not aware of the process had resulted in the signing of the contracts with the operating companies. In the case of Urcos the STPP ended its intervention because of a decision by the new mayor and in the other two cases a phase of re-negotiation has been started with these authorities in order to maintain the agreements and local legal stability, along with social peace, although it has been with mixed results.

### 7.3. Problems in terms of Communications

There were initial difficulties in conveying the messages on the new management model, given the complex elements and conceptual content of the management model and the various options for change in the promotion and communication strategy for operators. There were also other difficulties faced, which led to the initial bid notifications in Tamshiyacu and Tabalosos being declared as deserted, in the first quarter of 2005. This weakness in communication was because:



- Less information was given to the public to avoid public fatigue, loss of credibility, owing to delays in the beginning of the impact work.
- The importance of communication in the bidding process was underestimated, assuming that it was unnecessary to communicate this phase to the public, given its complexity.
- Adequate information flow was not strengthened and neither was the confidence of the municipality and civil society in the potential operators strengthened.

### 7.4. Problems with expectations in terms of infrastructure

Normally water and sanitation projects tend to be associated with infrastructure works. This is a very deep-rooted perception at various levels of society and public administration. Thus it was difficult in the beginning of the project to communicate the conceptual message of the proposal, emphasizing that the objective of the project was to improve management, administration or in the best of cases contribute to professionalism in the operation, maintenance and replacement of services. And that only after this would it be helped with the implementation of an “impact study” to improve services. However this in no way meant an immediate solution to the crisis faced by the service. To overcome this expectation in terms of infrastructure, an intense effort was made at communication and it was finally ensured that the majority of the population understood the STPP project and then accepted it, participating in a democratic manner in the selection of the model that was best suited to their economic and social reality.

However the socio-economic and technical diagnostics, the development plans of the services, warned that in some towns only investment in the impact study on which the project was based, was not enough improve the services substantially and that it was important to help the municipalities identify other financial



sources to complete this process. This was supported by carrying out pre-investment studies in the towns of Laredo, Tuman, Tabalosos and Tamshiyacu, besides supporting the Regional Government of Loreto in studies in Nauta. The results of these actions must be implemented in the years to come, with the support of the specialized operator hired in each locality.

**7.5. The transfer process**

After signing the management contracts between the municipalities and the specialized operators, the process of transfer of services was initiated, this took three to six months, depending on the characteristics of each town. In some cases they had to wait for the impact study to be finished before starting because of the impossibility of improving the quality of service without it or the absence of the service without it (Tamshiyacu) In other places such as Nueva Cajamarca and Sechura, the transfer was done in lesser time.

During this period, the municipality and the specialized operator had to agree on, prepare and execute actions on the following issues, which were particularly difficult:

- The transfer of human resources of the municipality to the specialized operator's payroll.
- The updating of the network map of the drinking water distribution systems and collection of wastewater.
- The valued inventory of the assets that would be transferred to the specialized operator for administration and keeping.
- The approval of accounts receivables of the municipality would be sent to the specialized operator for recovery.
- Transfer of rights, licenses and permits of the municipality linked to the provision of water and sanitation services.
- Cleaning and updating of the user census of the municipality and if any the record of users.
- Physical-legal formalization of the assets owned by the municipality and resolution of pending legal matters.

**Table 13: Summary of the problems identified in the STPP and its solutions**

Lack of a Specialized Operator market.	<ul style="list-style-type: none"> <li>• Local government ordinances, establishing the rules of play to improve management of the services.</li> <li>• Direct invitation to potential interested parties at the local, regional and national level.</li> <li>• Continuous follow-up after purchase of terms and conditions of the bid till the announcement of the winner of the bid.</li> </ul>
Problems that were political and social in nature	<ul style="list-style-type: none"> <li>• Flexibility in the intervention strategy and allowing the local actors to take the final decision.</li> <li>• Accept the option of returning to previous phases, to strengthen the agreements.</li> </ul>
Problems related to communications	<ul style="list-style-type: none"> <li>• Ensure a permanent communication strategy, in the various phases of intervention.</li> <li>• The local municipality must head the communication strategy by means of a committee formed along with local actors.</li> <li>• Answer all questions and queries posed by the public.</li> </ul>
Problems with expectations in terms of infrastructure	<ul style="list-style-type: none"> <li>• Strengthen the communication strategy to spread awareness about the objectives of the project: improve management.</li> <li>• Support local governments with pre-investment and investment studies in order to get financial resources to improve infrastructure.</li> </ul>

# Lessons learned

1. The promotion of the new operators and model of management of water and sanitation services requires a permanent information and communication strategy for the public and/or users of the service. Prior to starting the process, during it and in the subsequent stages, there should be a continuous flow of information to the public.

- The existence of a good level of prior information to the public and local leaders on the STPP allowed smooth transition to the phase of promotion and empowerment, as well as greater interest, expectations and commitment on the part of the social actors involved in taking the project forward.
- The main strength of the process of promotion is that it was anchored to political will and transparency of the local government, the strength of the local communication diffusion committee, with high degree of participation of civil society and the formation of a local endogenous core of social leaders and public opinion.
- The general informative-communicative-educative and participative methodology in the elaboration of information and diffusion materials is an effective instrument to discuss and analyze new conceptual and comprehension related challenges in the decision to change the management model.
- The actions for information-communication of the progress of the STPP to civil society and social organizations through the communication strategy guaranteed sustainability of the social process and helped avoid reversals or distortions due to political interference.
- A strategy is required to link the municipality and local private sector based on the diagnosis of its real capacities and its perception of the possibility of investment in the local water and sanitation sector.

2. The hiring of specialized operators for services in the small towns should be based on the adoption of clear and simple

rules, which would help sustain the process and define the appropriate profile of the operator for each town.

Given the legal gaps that existed when the project started, on issues relating to the hiring of an operator, the 9 municipalities laid down four ordinances to clarify the rules of the process: Ordinance on Provision of Services, on the Community Neighborhood Supervision Board, Attention to Claims and on the Pricing System.

Given that the ordinance on the provision of services and the ordinance on attention to claims refer to the rights and duties of the users and the service providers, the governing body should promulgate the required norm, which would standardize these rights and duties.

3. The benefits of the new model for the municipalities are:

- Real charges associated to the quality levels of the service and approved by the public are fixed.
- It frees municipal resources allowing greater focus on the municipal subsidies for those who really need it.
- It allows the establishment and specification of service quality objectives, which can be demanded of the specialized operator.
- Efficiency objectives are fixed and specified, thus avoiding the transferring of the results of inefficient management to the users and keeping the charges for the service more accessible to the users.
- It allows civil society to support the municipality in monitoring the quality of service.

4. The change in the model of management of the small town services can be done with a strong element of social promotion and participation. The commitment of the municipality, of the users and the specialized operator can form the basis for a new institutional arrangement that defines a medium-term



work strategy to improve services, increase investments and guarantee sustainability of services.

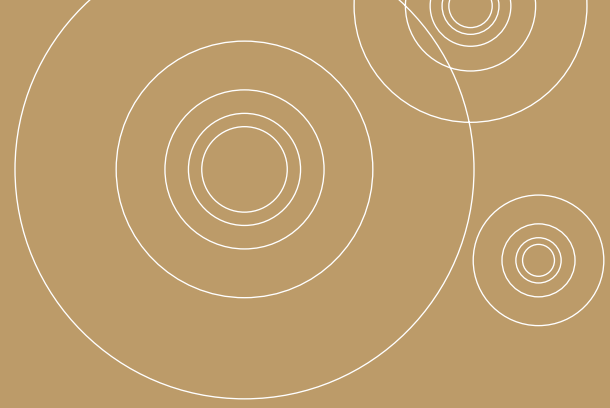
Social participation in the process of selection of the specialized operator brings transparency in the process and reduces the perceived risk of potential bidders vis-à-vis long-term contracts with the municipalities.

5. The hiring of a specialized operators in small towns does not require a minimum market scale. It will be the social, economic and technical characteristics of each town that will determine the type of specialized operator who will provide the service of this essential commodity.
6. With due training on issues of quality of service and its associated costs, people can take appropriate decisions in their own interest, which may involve an increase in charges till arriving at a charge that allows full recovery of costs associated with the quality objectives of the service.
7. In small towns the poorest section can be taken care of by levying charges that are in keeping with their economic capacity. This can be done by hiring specialized operators who are suited to the scale of operations, who do not disturb the local labor market and on the basis of a consistent socio-economic study.
8. To have a successful selection process for specialized operators the terms and conditions of the tender and the management contract must be designed to make sense in the local context, without creating insurmountable barriers for access in terms of the profile of the operator.
9. It is important to promote, among the bidders, the presence of at least one person who has been associated with the supply of water and sanitation services in an EPS, JASS or municipality. This helps the bidder evaluate the risks in the operation with greater awareness of the reasons, especially in order to overcome the fear of non-payment.
10. The bidders must be supported during the entire process, so that they can adequately evaluate the risks and cash flows of each operation. The processes must have adequate time for the technical aspect to be combined with the financial aspect of the proposal.
11. The national market in small towns can allow operators to assume the risk of operation and maintenance of systems, the commercial risk and the risk of working capital investments. It is difficult for the moment for them to take on the risk of investments owing to the absence of suitable long term credits in the national financial market and the impact on the returns on their investments.
12. The capacity for payment of the people in small towns is such that they cannot be burdened with charges for extension of coverage of services. Hence this must be the responsibility of the municipalities with the help of transfers from the central and regional government.
13. The creation of a market for specialized operators in the small towns of Peru, has tremendous potential today if the Central Government give technical assistance to the municipalities to conduct the processes, the local governments have appropriate information and know the advantages of hiring specialized operators, the Central Government offers incentives for extension of coverage, with the participation of specialized operators and the users have access to information and are invited to take part in participative processes to take decisions on quality-price for the service and also commit to support the sustainability of their services.









**Water and Sanitation Program  
Latin America and the Caribbean Region**

World Bank Office, Lima.  
Alvarez Calderón N° 185,  
San Isidro, Lima 27, Perú

Phone: (511) 615-0685  
Fax: (511) 615-0689  
E-mail: [wspiac@worldbank.org](mailto:wspiac@worldbank.org)  
Website: <http://www.wsp.org>